

# *Bureau of Water*

*South Carolina Department of Health and Environmental Control*



## South Carolina Water Use Report 2005 Annual Summary



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# **South Carolina Water Use Report 2005 Summary**

**South Carolina Department of Health and  
Environmental Control  
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## Forward

The South Carolina Department of Health and Environmental Control (DHEC) is committed to the responsible management of South Carolina's water resources by encouraging continued conservation and reasonable use to ensure a sustainable supply for present and future demands. The South Carolina *Surface Water Withdrawal and Reporting Act*, §49-4-10 et. seq., and the South Carolina *Groundwater Use and Reporting Act*, §49-5-10 et. seq., require water users that withdraw three (3) million gallons or greater in any month to register with and report use annually to the Water Use Program at DHEC.

Water Use data is used by the State of South Carolina to better define the distribution and demand for our surface and groundwater resources across the state. Data from the Water Use Program at DHEC is shared between other local, state, and federal regulatory and scientific agencies to establish a common understanding of the demands placed upon our water resources. This common database has proven critical in water management decisions and water use conflict resolution.

Statistics utilized in this report represent data obtained from registered users of the Water Use Program. Consumptive use from private domestic wells, small surface water irrigation intakes, facilities that do not meet the reporting threshold, or data from facilities failing to report their annual water use are not included in this annual summary. For the year 2005, compliance of reporting facilities exceeded 99.9%, with eight (8) facilities failing to report water use prior to the writing of this report.

If you have questions about this or previous Annual Water Use Reports, or would like to obtain further information about reported water withdrawals in South Carolina, please contact:

**Water Use Program  
SCDHEC Bureau of Water  
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[www.scdhec.net/water](http://www.scdhec.net/water)**

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## Introduction

South Carolinians have enjoyed an available fresh water supply that is clean, abundant, easily attainable and, for all practical purposes, inexhaustible. In South Carolina today, close to 1.2 million people rely on groundwater and 2.8 million people rely on surface water for their drinking water and sundry uses. According to the U.S. Census Bureau, South Carolina will increase its population by 600,000 people by 2025 and the U.S. Department of Agriculture reports development converts approximately 100,000 acres per year to urban uses. This growth and development in the state has placed increasing demand on our water supplies.

In conjunction with natural conditions, the continued impact to groundwater systems through human induced contamination (physical and chemical) or natural impact demonstrate the vulnerability of this finite resource and the continuing need to closely monitor, manage and preserve the resource in South Carolina for current and future generations. The state General Assembly declared that,

“...the groundwater resources of the State be put to beneficial use to the fullest extent to which they [are] capable and to provide and maintain conditions which are conducive to the development and use of all water resources.”

Consistent and accurate data collection is requisite in establishing water use trends and implementing reasonable management strategies. Water use reporting outside of designated Capacity Use Areas has been historically voluntary. As of January 1, 2001, anyone withdrawing groundwater or surface water in excess of three (3) million gallons per month (in any month) must register and report that use annually to the South Carolina Department of Health and Environmental Control (Department). Registration and reporting is now a requirement of law and the Department has authority to take enforcement action against those not reporting.

## Purpose and Methodology

The purpose of the annual *South Carolina Water Use Report* is to summarily present reported water use in South Carolina by county and use category during calendar year 2005. The Department maintains and continually updates the water use and facility databases utilized in this report. Water use data were collected by annual reporting of water use by registered users, as required and mandated by state law, and are reported in **million gallons** unless stated otherwise.

## South Carolina Climate

The climate in South Carolina is affected by many factors, notably its location in the mid-latitudes and its proximity to the Appalachian Mountains and the Atlantic Ocean. During the summer, ocean current-driven air masses such as the Bermuda High routinely push tropical air from the Gulf of Florida upland from the coast. These warm, moist currents collide with cooler, drier air masses to generate rainfall, and at times, severe thunderstorms. In contrast, the Appalachian region in the northwest portion of the state experiences cooler temperatures, owing in part to orographic lifting of air masses and subsequent cooling effect provided by the increase in altitude. Altitude change also causes the additional phenomenon of down-slope heating as air masses from the mountains settle and compress over the eastern Blue Ridge and Piedmont region. During the winter months, the highlands of the Blue Ridge escarpment deflect northerly cold air to the southwest, often lessening the impact of major cold fronts and winter storms.

The vast majority of the state is classified as humid subtropical except in the Blue Ridge physiographic province, where it is humid continental. Average temperature varies from the mid-50s °F in the mountains to low-60s °F along the coast. The average annual precipitation is approximately 48 inches, with an annual total in the mountains of 70 to 80 inches, an annual total in the Midlands of 42 to 47 inches and an annual total along the coast of 50 to 52 inches. According to the South Carolina State Climatology Office, no month in South Carolina averages less than two inches of precipitation, regardless of location within the state. Measurable snowfall is rare, occurring one to three times a year with accumulations seldom remaining more than a day or two. Since 1900 severe droughts have occurred statewide in 1925, 1933, 1954, 1977, 1983, 1986, 1990, 1993, and most recently 1998. The latest multiyear drought was one of the most severe in South Carolina's history, with average precipitation, groundwater levels, and stream flows at or near record lows. In 2005 the average statewide temperature was 62.6°F, and the average rainfall for 2005 was 49.08 inches<sup>1</sup>.

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<sup>1</sup> Southeast Regional Climate Center, 1885-2006, "Monthly and Seasonal Climate Information"

# South Carolina Geography and Hydrology

## Geography and Physiography

South Carolina has a distinct natural beauty and an ecological diversity covering nearly 31,189 square miles, with approximately 30,111 square miles land area, 1,078 square miles inland or coastal waterways and 135 miles of coastline. The diversity we experience is resultant of climatic conditions, geology and three major physiographic regions: the Blue Ridge, the Piedmont and the Coastal Plain (**Figure 1**). The physiographic regions exhibit variations in topography, geology, hydrology and vegetation that directly affect the quantity, quality and availability of water resources in South Carolina.

### Blue Ridge

The Blue Ridge physiographic province is located in the extreme northwest portion of Oconee and Pickens counties, and is distinguished from other parts of South Carolina by greater elevations (1,000 – 3,300 feet) and surface relief. Dissected mountains, rugged hills and thick forest regions characterize the land surface. Surface water in the Blue Ridge takes the form of high gradient creeks and streams and natural or man-made lakes, while groundwater occurs in the fractures of the bedrock and a thin veneer of soil and saprolite. In general, water quality of streams and groundwater is excellent in the Blue Ridge owing to the constant replenishment from abundant local rainfall.

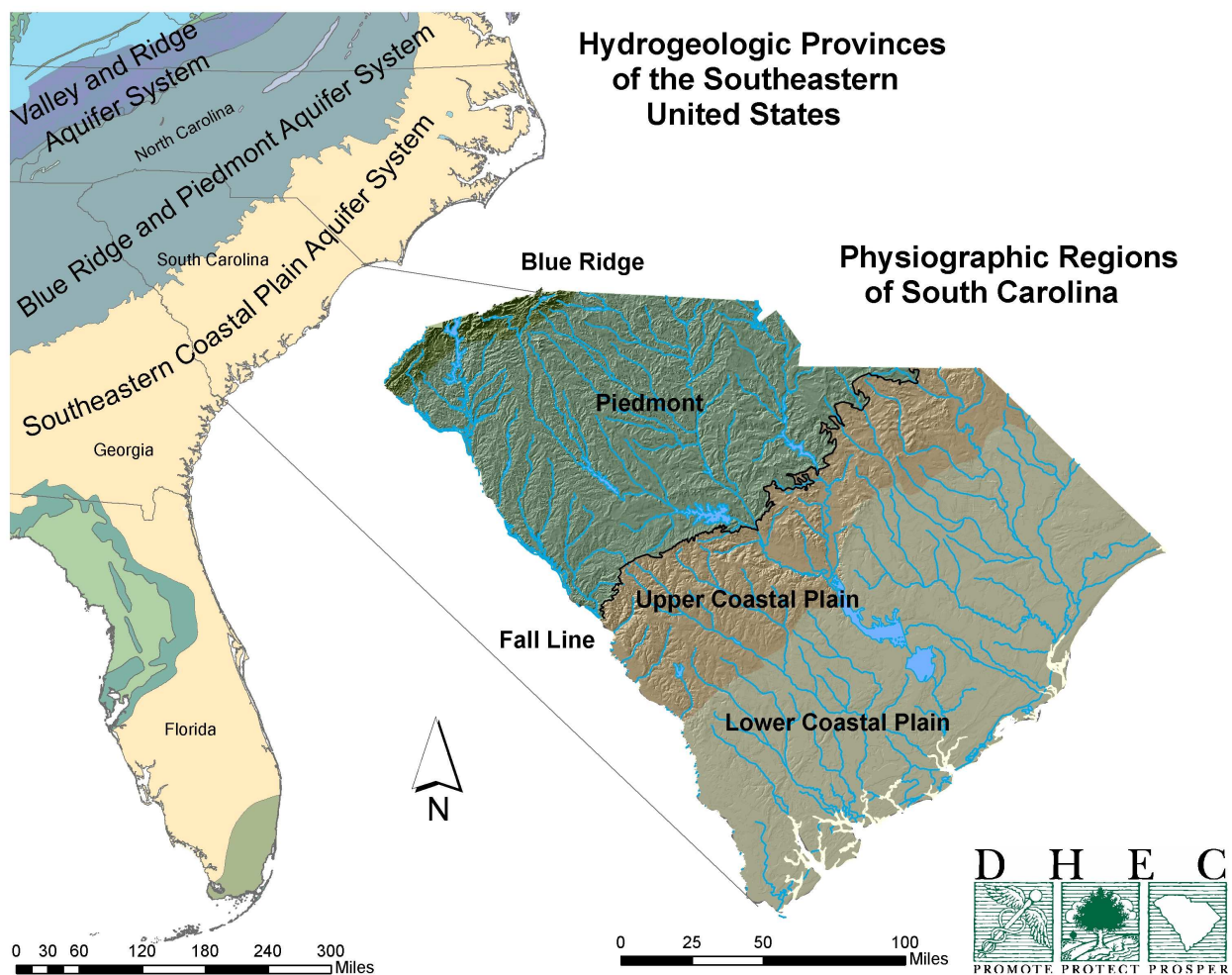
### Piedmont

The Piedmont physiographic province includes all counties, or portions of counties, northwest of and to the Fall Line, exclusive of those counties within the Blue Ridge province. Although similar to the Blue Ridge, the region demonstrates lower topographic relief, and therefore lower gradient streams, while elevations range from between 450 to 1000 feet above sea level. Counties in the Piedmont and Blue Ridge physiographic provinces depend primarily on the abundant regional rainfall that recharges lakes, reservoirs and major river systems. These surface water bodies constitute the primary source of water for public supply, industry, agriculture, and power production in the Piedmont Region. Similar to the Blue Ridge Province, groundwater occurs in the fractures of the bedrock and overlying soil and saprolite, and is also of good quality, except in locations where its chemical quality has been impacted by man.

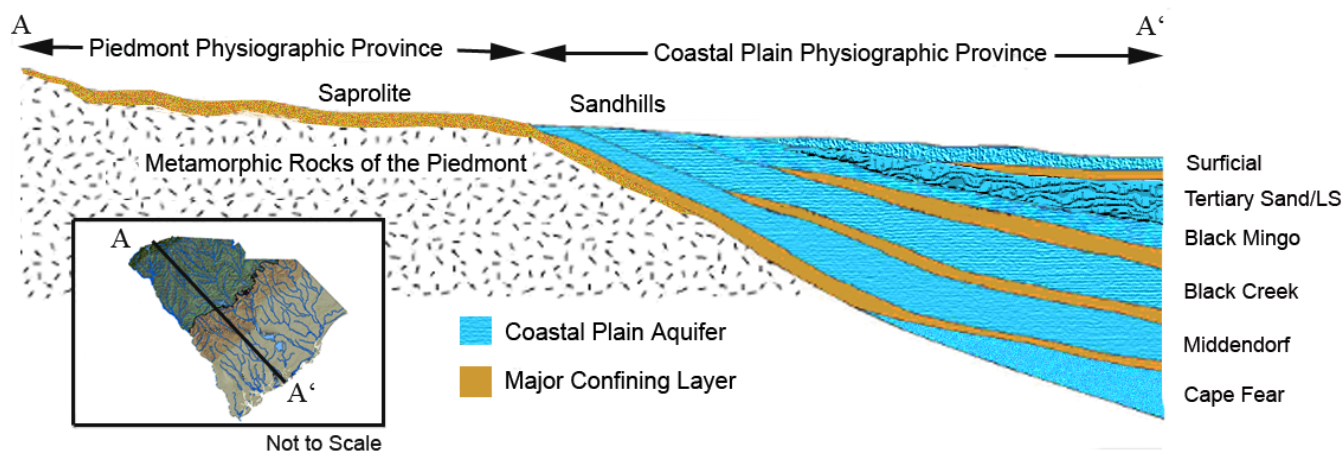
### Coastal Plain

The Coastal Plain physiographic province includes all counties, or portions of counties, extending from the Fall Line east to the Atlantic Ocean. Elevations of the exposed Coastal Plain range between 450 feet to sea level. Once below the Fall Line, rivers and streams assume a different character than found in the Piedmont. Where streams once rolled across exposed Piedmont rocks and tumbled down the occasional stretch of whitewater, the Coastal Plain dictates a slower pace and quiet meandering river channels with adjacent wetlands are common. Regional geology of the Coastal Plain is characterized by aquifers developed in layers of sands, silts, or high-permeability limestone confined by units of clay and silts or low-permeability limestone. The vast majority of South Carolina's water resources are contained as groundwater in the Coastal Plain, and in general, reliance on groundwater for irrigation, industrial uses, and public water supply increases dramatically east of the Fall Line (**Figure 7**). A generalized cross-section for the Coastal Plain aquifers is presented as **Figure 2**, and a brief outline of the major aquifers in South Carolina follows.





**Figure 1:** Hydrogeologic and Physiographic Setting for Water Use in South Carolina



**Figure 2:** Generalized Hydrogeologic Cross-Section from the Blue Ridge through the Lower Coastal Plain in South Carolina

## **Groundwater Resources**

Groundwater resources are found throughout the subsurface of South Carolina in varying quantities, qualities, and depths that reflect the nature of the geologic materials that host the respective aquifers. The following is a brief description of the State's major groundwater resources.

### **Crystalline Rock Aquifer System of the Blue Ridge and Piedmont**

Geology of the Blue Ridge is typically characterized by clayey saprolite, ranging in depth from several feet to tens of feet, overlying metamorphic crystalline rock. The saprolite grades downward through a highly permeable transition zone to unaltered parent bedrock. Groundwater conditions of the bedrock are dependent on the number of fractures and degree of interconnection of the fracture systems. Groundwater moves slowly through the saprolite and discharges to surface water bodies, wells, or is released from storage to the underlying bedrock through fractures. Geology of the Piedmont is similar to that of the Blue Ridge, but the diminished relief allows for greater thickness of saprolite development. In general, wells in the Blue Ridge and Piedmont regions yield little water when compared to wells drilled in the Coastal Plain owing to the inherently low porosity and permeability of the crystalline rock present in the upstate.

### **Surficial Aquifer System**

Shallow sands that comprise the Surficial aquifer are among the youngest of the Coastal Plain sediments and are found exclusively in the Lower Coastal Plain (**Figure 1**). This system is capable of producing water in modest amounts for irrigation and private drinking water supply, but is especially susceptible to contamination due to its shallow, unconfined nature. The Surficial sands are highly influenced by local precipitation and river stage and are especially prone to dramatic water level declines during times of drought.

### **Tertiary Limestone/Sand Aquifer System (Floridan Aquifer System)**

In the southern half of the Coastal Plain, Tertiary aquifers consisting of sand grade southeastward into an ever thickening wedge of limestone. Development of the aquifer system is common in the Charleston, Dorchester, and Berkeley County area. Southwest of the Combahee and Salkehatchie Rivers, upper sections of the limestone become increasingly permeable owing to abundant voids created from dissolved marine fossils, and are capable of storing and supplying tremendous amounts of water. The majority of utilization of the aquifer occurs near the upper, highly permeable zone that supplies the majority of residential wells in Beaufort and Jasper Counties, and is the primary source of water for public supply, irrigation, and industry in the Low Country. This southern section of the Tertiary Limestone correlates regionally with the Upper Floridan Aquifer that extends from southern South Carolina to the southern keys of Florida.

### **Black Mingo Aquifer**

Development of the Black Mingo is common in the vicinity of Charleston, Dorchester, and Berkeley counties, but has been largely overlooked south of Dorchester County owing to the increasingly prolific nature of the more shallow Tertiary Limestone (Floridan Aquifer System). Like the majority of Coastal Plain sediments, the nature of the aquifer differs dramatically from one area to the next. In the Charleston area, the aquifer is composed of permeable sand and limestone, while within the Upper Coastal Plain the Black Mingo is often a poorly producing aquifer composed of fine silt and clay, and therefore is unused in favor of the Middendorf or Tertiary Sand Aquifer.

### **Pee Dee Aquifer**

The Pee Dee aquifer, where present, generally produces quality water at moderate rates. The aquifer matrix is composed of sand and silt separated by discontinuous intervals of clay. Development of the Pee Dee aquifer usually takes place in conjunction with the more prolific Black Creek aquifer and has become an excellent alternative to the often-overburdened Black

Creek for many uses, especially irrigation. The Pee Dee aquifer is most utilized in the northeast portion of the State, with the most demand centered between Florence and Horry Counties.

### **Black Creek Aquifer**

Though present throughout much of the Coastal Plain, development of the Black Creek aquifer has been conducted primarily in the mid-to-northern portions of the Coastal Plain. The aquifer is composed of silt and fine sand with coarse sand in the Upper Coastal Plain. The Black Creek aquifer is an important source of water for public supply, irrigation, and industry from Marion County southeast to Georgetown County.

### **Middendorf Aquifer**

The Middendorf Aquifer is a prolific source of water throughout the majority of the coastal plain and consists of coarse-grained fluvial sands near the Fall Line that grade to fine-grained marine sands and clay in the northern and eastern Lower Coastal Plain. The majority of the Pee Dee region, including Chesterfield, Darlington, Florence, and Marlboro Counties, as well as Orangeburg and Sumter Counties rely heavily on the Middendorf for irrigation, public supply, and industrial use. In the past decade, use of the Middendorf has increased along the southern coast in areas such as Charleston County.

### **Cape Fear Aquifer**

Little published information exists from this deep sand aquifer owing to the few wells that have penetrated the formation. In general, water quality from the Cape Fear aquifer is poor over much of its extent owing to ancient, unflushed seawater and extensive mineralization. In South Carolina, the Cape Fear aquifer is largely unused.

## **Surface Water Resources**

South Carolina's land surface is drained by eight (8) major river basins, all of which are critical to public water supply, irrigation, industry, and/or power generation. These major watersheds are shown as **Figure 3**, and a brief description of each major watershed follows.

### **Broad River Basin**

The Broad River Watershed encompasses portions of North and South Carolina and drains the majority of Cherokee, Union, Spartanburg, and Greenville Counties. Portions of Chester, Fairfield, Richland and York counties are also included in the basin, and are drained by the Enoree, Pacolet, and Tyger Rivers, major tributary streams to the Broad River.

### **Catawba River Basin**

Similar to the Broad River Basin, the watershed of the Catawba River drains counties in North and South Carolina east of a hydrologic divide in York, Chester, and Fairfield Counties. All or portions of the following counties lie within the basin: Chester, Fairfield, Kershaw, Lancaster, Richland, Sumter and York. The Catawba basin hosts Lake Wylie, Fishing Creek Reservoir, Lake Wateree, the Catawba and Wateree Rivers and associated tributary streams.

### **Edisto River Basin**

The Edisto River Basin encompasses nearly all of Orangeburg County and portions of Aiken, Berkeley, Calhoun, Dorchester, and Lexington counties. The basin drains the central Coastal Plain and contains the North and South Forks of the Edisto River and tributaries, as well as numerous ecologically important wetland areas.

### **Pee Dee River Basin**

The Pee Dee River Basin is the largest of South Carolina's watersheds and drains all or portions of Chesterfield, Darlington, Dillon, Georgetown, Horry, Kershaw, Lancaster, Lee, Marion, Marlboro, Williamsburg counties, and portions of southeastern North Carolina. The

Greater Pee Dee Watershed encompasses 5.1 million acres and includes the Pee Dee, Lynches, Waccamaw, and Sampit watersheds, as well as the Intracoastal Waterway and Winyah Bay.

### **Salkehatchie River Basin**

The Salkehatchie basin is located entirely in the Coastal Plain and drains portions of Bamberg, Barnwell, Beaufort, Colleton, Hampton, and Jasper counties. The Coosawhatchie, Salkehatchie and Little Salkehatchie Rivers, along with their associated tributaries and local wetlands drain the basin and form tide-dominated distributary channels near the coast.

### **Saluda River Basin**

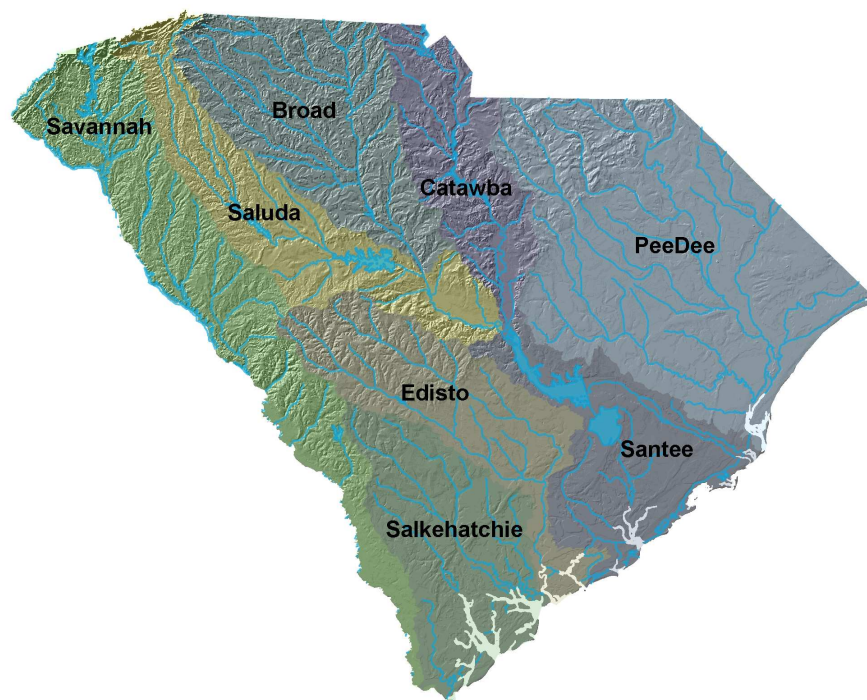
The Saluda River Basin drains the central portion of South Carolina's Piedmont Region and encompasses major portions of Greenville and Pickens counties, as well as portions of Abbeville, Greenwood, Laurens, Lexington, Richland, and Saluda Counties. The basin includes all tributary streams to the Saluda River and Lakes Greenwood and Murray, the latter being a critical source for public water supply and hydroelectric power in central South Carolina.

### **Santee River Basin**

The Santee River basin originates near the confluence of the Catawba and Broad River Basins and includes two of the State's largest reservoirs, Lake Marion and Lake Moultrie. These two major surface water resources are important power generating assets for the South Carolina. The basin drains Berkeley, Calhoun, Charleston, Clarendon, Dorchester, and small portions of Georgetown and Sumter Counties via tributaries of the Cooper, Santee and Ashley Rivers.

### **Savannah River Basin**

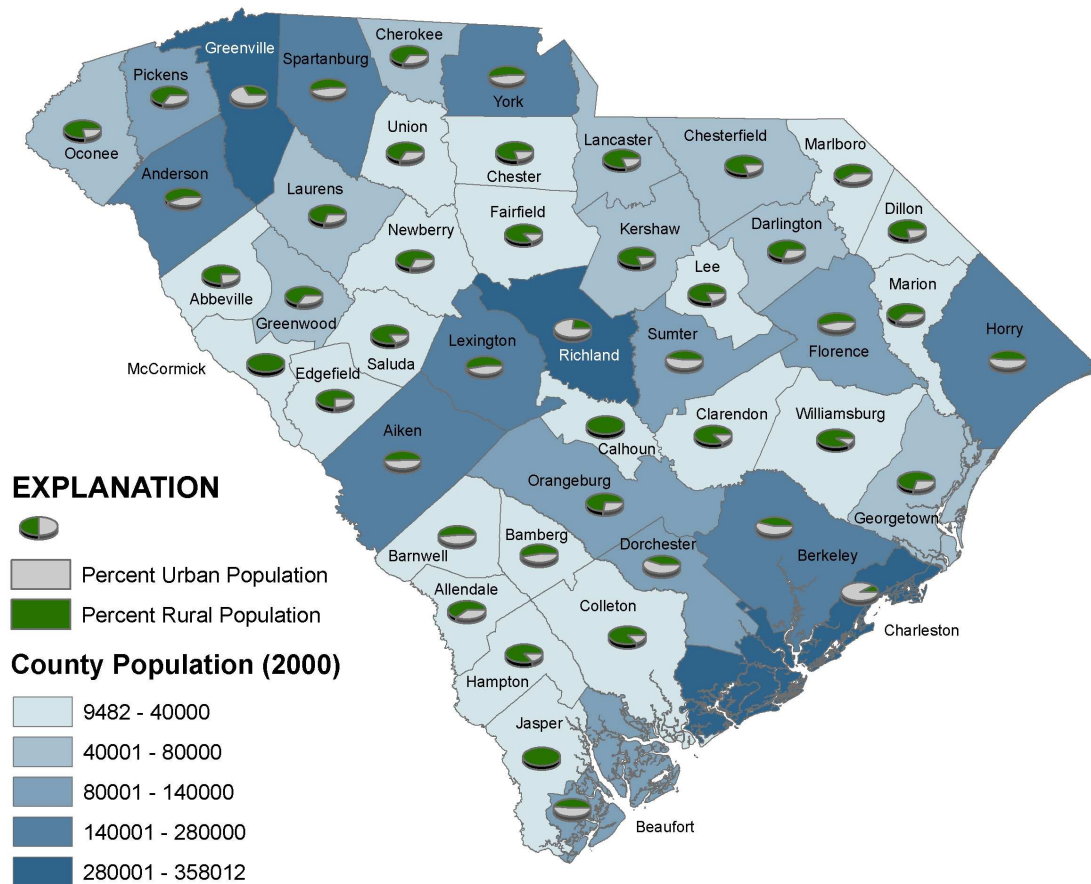
The Savannah River Basin stretches from the Blue Ridge to the Atlantic Ocean and encompasses the border counties of South Carolina. The watershed drains major portions of Abbeville, Aiken, Allendale, Anderson, Edgefield, Greenwood, Hapton, McCormick, Oconee, and Pickens County, as well as adjacent counties in Georgia. The watershed includes the Savannah, Chatooga, Seneca, Little River, Stevens Creek, Rocky, and Tugaloo Rivers, and discharges approximately 8.0 billion gallons per day.



**Figure 3:** Major River Basins of South Carolina

## Demographics

According to the 2000 Census, South Carolina's estimated population is 4,012,012. Approximately 54.6% of the population resides in an urban setting and approximately 45.4% reside in rural communities (**Figure 4**). South Carolina has approximately 25,000 farms, occupying 4,846,000 acres (7,572 square miles). Of this, approximately 2,270,000 acres (3,547 square miles) are cropland<sup>2</sup>. Major manufacturing industries are located along the I-26/I-85 corridor, specifically in the Greenville-Spartanburg Metropolitan Statistical Area (MSA), Columbia MSA, Charlotte-Gastonia-Rock Hill MSA and the Charleston MSA. Other manufacturing concentrations are located in the Augusta-Aiken MSA, and the Florence area<sup>3</sup>. South Carolina is served by 47 electric utilities and nine (9) generating utility companies with 51 power plants (206 generators) with a total rating capacity of 18,827.4 megawatts. Power production in the State (2005) totaled 94,363 million kilowatt hours<sup>4</sup>.



**Figure 4:** Population by County in South Carolina, 2000

<sup>2</sup> 2002 Census of Agriculture, Volume 1 Geographic Area Series, Historical Highlights: "Table 1: 2002 and Earlier Census Years"

<sup>3</sup> S.C. Department of Commerce, 2000/2001 "South Carolina Industrial Directory."

<sup>4</sup> S.C. Budget and Control Board Statistical Abstract 2004

## **2005 Water Use Profile**

### **Surface and Groundwater Use Summary by Category and County in South Carolina, 2005**

The following section outlines all reported water use for the State of South Carolina for the calendar year 2005. Water use is summarized by category, and further tabulated on a county-by-county basis. Where appropriate, the spatial distribution of the magnitude of water use is demonstrated on an accompanying map with a breakdown chart of groundwater and surface water use as a percentage of total use for the category.



## Reporting Water Withdrawers

For the reporting year 2005, South Carolina had registered 862 water withdrawers with 2,506 sources, 481 surface water facilities with 702 sources and 541 groundwater facilities with 1,804 sources.

Water Use Category	Facilities	GW Source	SW Source
Golf Course	248	262	272
Water Supply	223	770	78
Irrigation	222	491	237
Industrial	93	222	52
Hydroelectric	31	1	32
Thermoelectric	19	8	16
Mining	12	10	7
Aquaculture	9	11	8
Other	5	29	0
<b>Total</b>	<b>862</b>	<b>1,804</b>	<b>702</b>

## Total Reported Water Use

Total water use reported for 2005 was more than 20 trillion gallons from 862 reporting facilities. Surface water withdrawal from 481 facilities accounted for approximately 20.4 trillion gallons, approximately 99.6% of total water use. Groundwater withdrawal from 541 reporting facilities accounted for approximately 72.1 billion gallons or approximately 0.4% of total use.

Water Use Category	Groundwater	Surface Water	Total	Percentage
Aquaculture	182.93	227.37	410.31	0.0020%
Golf Courses	3,099.41	8,808.68	11,908.10	0.0583%
Industrial	11,830.92	140,255.88	152,086.80	0.7445%
Irrigation	14,065.22	7,858.81	21,924.04	0.1073%
Mining	2,709.77	595.40	3,305.18	0.0162%
Other	105.63	NR	105.63	0.0005%
Hydroelectric	0.33	15,766,866.75	15,766,867.08	77.1793%
Thermoelectric	2,043.32	4,254,461.12	4,256,504.44	20.8357%
Water Supply	38,113.35	177,657.70	215,771.05	1.0562%

NR = None Reported

Water Use	2000	2001	2002	2003	2004	2005
Hydroelectric	10,281,681.91	9,796,267.91	11,415,081.44	18,958,207.77	15,203,000.521	15,766,867.08
Thermoelectric	2,240,508.37	1,624,984.88	2,467,042.32	3,558,474.88	3,232,104.071	4,256,504.44
Water Supply	148,265.21	193,525.29	212,402.79	197,088.27	209,464.303	215,771.05
Industrial	157,463.33	180,579.90	167,051.34	168,334.76	157,309.024	152,086.80
Irrigation	3,182.73	27,121.14	29,668.39	12,172.86	24,119.869	21,924.04
Golf Course	6,806.35	13,302.54	14,022.92	10,373.47	13,230.462	11,908.10
Mining	3,056.08	2,691.75	3,159.88	4,935.07	3,241.623	3,305.18
Aquaculture	13.67	865.17	2,283.95	1,451.98	1,355.631	410.31
Other	223.61	204.84	106.22	59.033	85.505	105.63
Total	12,841,201.26	11,839,543.42	14,310,819.25	22,911,098.09	18,843,911.009	20,428,882.61
Facilities	577	931	848	833	848	862

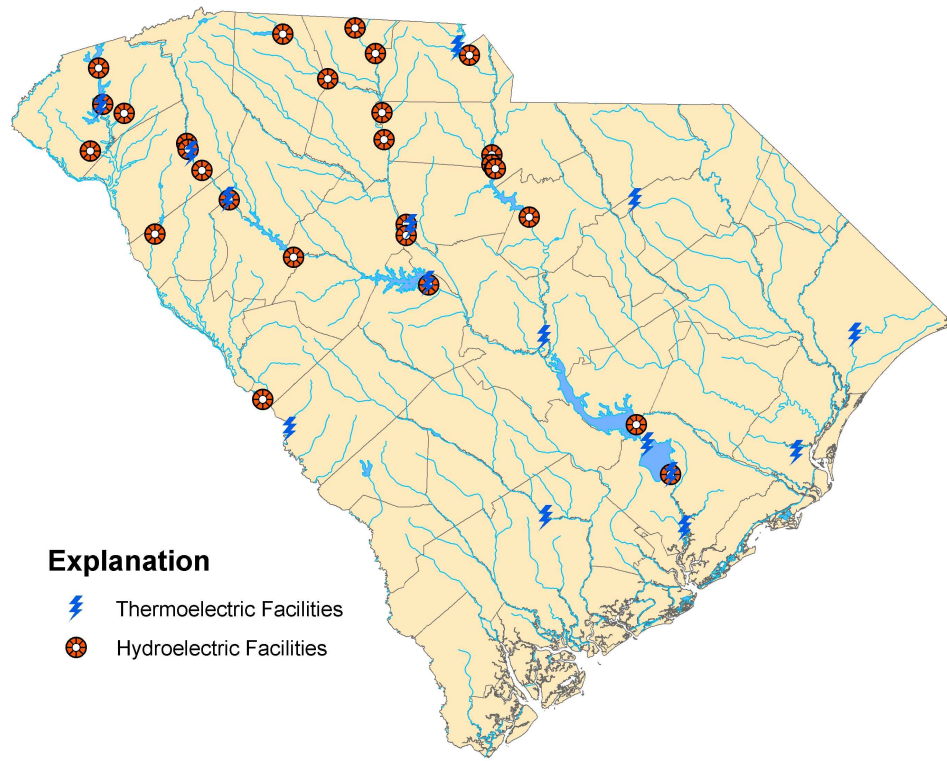
## Water Use in Power Production

According to the 2001 Energy Use Profile, South Carolina has 9 power generating utility companies with 51 power plants containing 206 generators with a total rating capacity of 18,827.4 megawatts (2000). The type generators are as follows:

- 96- Hydraulic Turbine (conventional)
- 54- Gas Combustion Turbine
- 37- Steam Turbine (boiler)
- 16- Hydraulic Turbine (pump storage)
- 3- Internal Combustion (diesel)

The primary energy source for the generators is as follows:

- 112- Water
- 32- Diesel Fuel Oil
- 28- Coal
- 25- Natural Gas
- 7- Nuclear
- 2- Residual Fuel Oil



**Figure 5:** Distribution of Hydroelectric and Thermoelectric Facilities in South Carolina

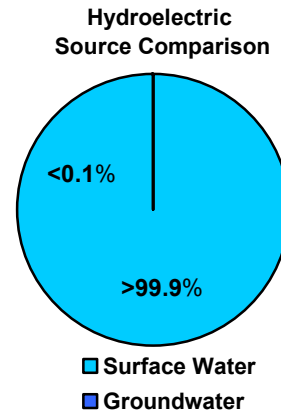


## Hydroelectric Water Use

Hydroelectric facilities employ energy from flowing water to generate electricity. Hydroelectric facilities utilize *impoundments* (reservoirs), *diversion* (run-of river), or *pumped storage* (reversible turbines). Water use is typically non-consumptive flow-through, with temporary diversion from down stream users. Reported water use for 31 hydroelectric sources accounted for approximately 15.766 trillion gallons, approximately 78.7% of reported water use for power production and 77.1% of total reported water use for the year.

County	Surface Water	Groundwater	County Total
Abbeville	37,686.0	NR	37,686.0
Anderson	191,000.0	NR	191,000.0
Berkeley	1,251,619.0	0.3	1,251,619.3
Cherokee	407,518.0	NR	407,518.0
Chester	2,067,474.0	NR	2,067,474.0
Edgefield	1,150,053.5	NR	1,150,053.5
Fairfield	2,944,701.1	NR	2,944,701.1
Greenwood	363,517.0	NR	363,517.0
Kershaw	1,242,431.0	NR	1,242,431.0
Lancaster	1,204,198.0	NR	1,204,198.0
Laurens	120,000.0	NR	120,000.0
Lexington	371,476.6	NR	371,476.6
Oconee	12,700.0	NR	12,700.0
Pickens	2,769,742.0	NR	2,769,742.0
Richland	469,660.9	NR	469,660.9
Spartanburg	17,962.7	NR	17,962.7
Union	186,662.0	NR	186,662.0
York	958,465.0	NR	958,465.0

NR = None Reported



	Surface Water	Groundwater
<b>Source Total:</b>	15,766,866.7	0.3

<b>Total Hydro Power Use (million gallons):</b>	<b>15,766,867.0</b>
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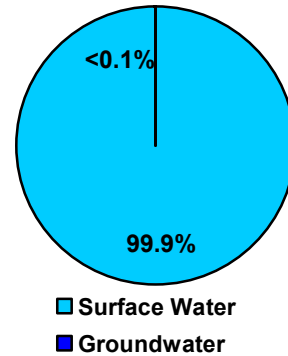
## Thermoelectric Water Use

Thermoelectric facilities generate electricity by superheating water to steam then passing the steam under pressure to turbines. Boilers are fired by coal, nuclear power or residual fuel oil. Large volumes of cooling water are required to condense the steam to the liquid state. Reported water use for 19 thermoelectric sources accounted for more than 4.254 trillion gallons, approximately 21.3% of reported water use for power production and 20.8% of total reported water use for the year.

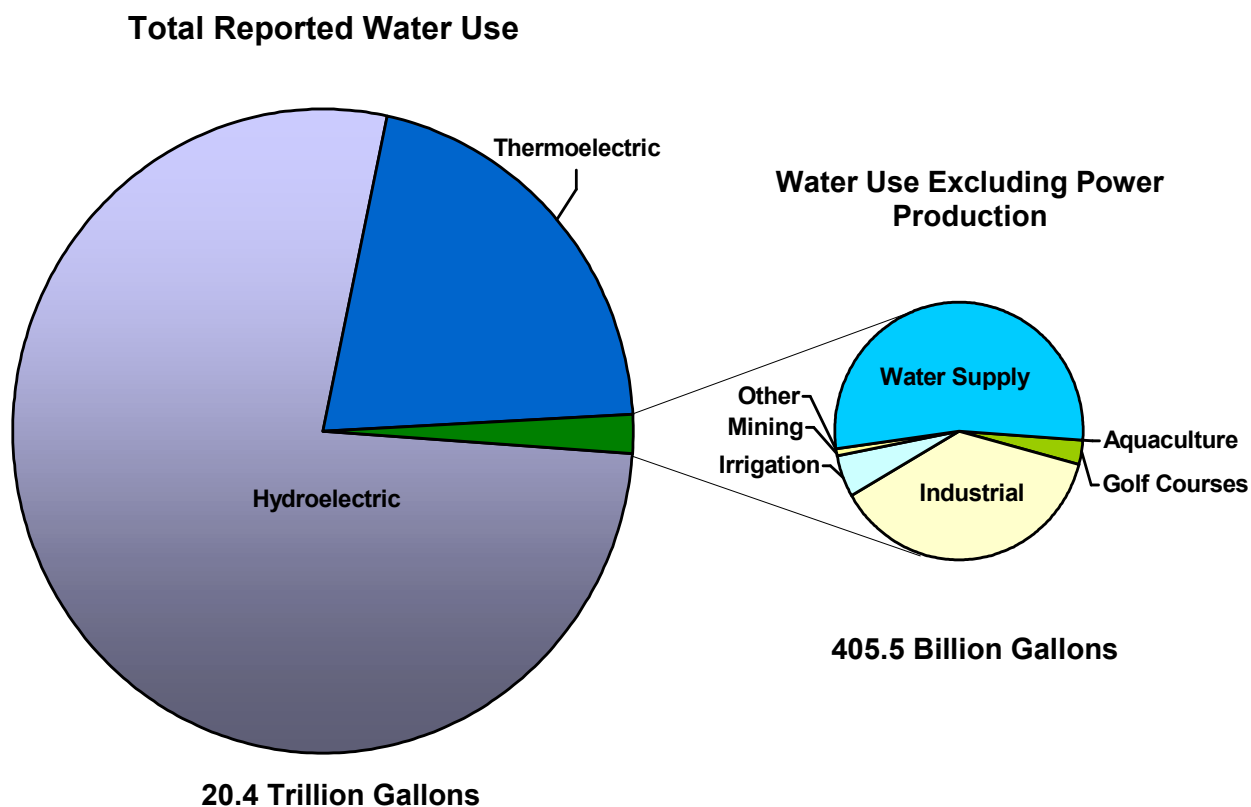
County	Surface Water	Groundwater	County Total
Aiken	45,545.000	NR	45,545.000
Anderson	49,744.210	NR	49,744.210
Berkeley	12.283	NR	12.283
Berkeley	203,543.688	NR	203,543.688
Cherokee	NR	1.022	1.022
Colleton	0.677	NR	0.677
Colleton	1,484.532	NR	1,484.532
Darlington	277,346.000	362.284	277,708.284
Fairfield	561,069.950	NR	561,069.950
Georgetown	4,324.245	NR	4,324.245
Horry	44,742.870	NR	44,742.870
Lexington	56,018.900	NR	56,018.900
Oconee	2,814,848.000	NR	2,814,848.000
Orangeburg	NR	1,667.052	1,667.052
Richland	158,609.723	NR	158,609.723
York	37,184.000	NR	37,184.000

NR = None Reported

Thermoelectric Source Comparison



	Surface Water	Groundwater
<b>Source Total:</b>	4,254,474.08	2,030.36
<b>Total Thermoelectric Use (million gallons):</b>	4,256,504.44	



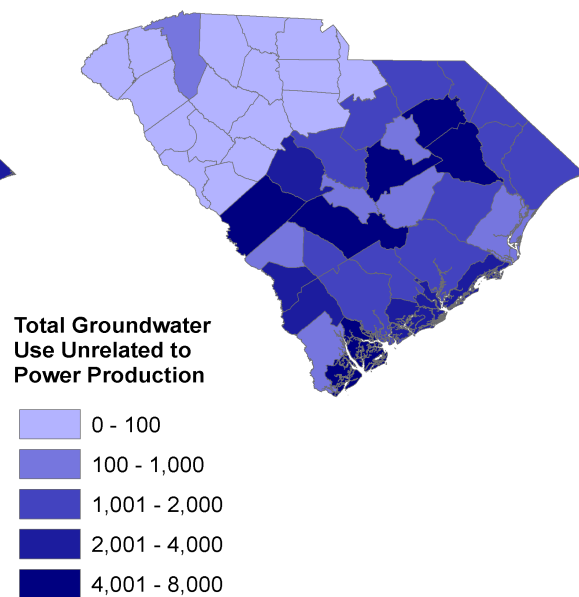
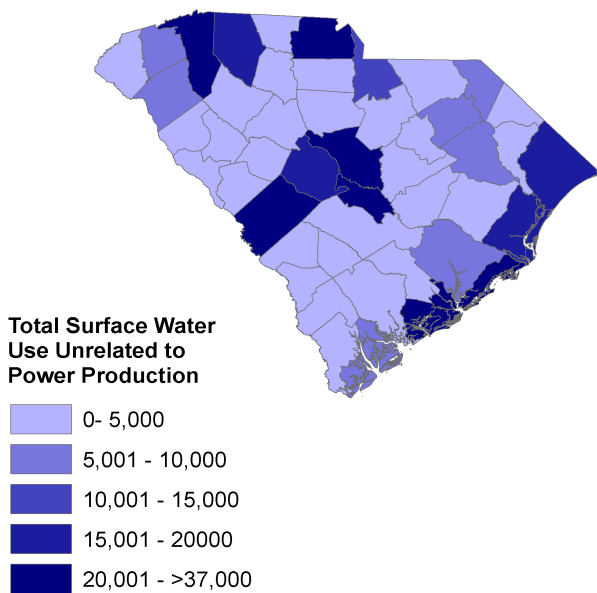
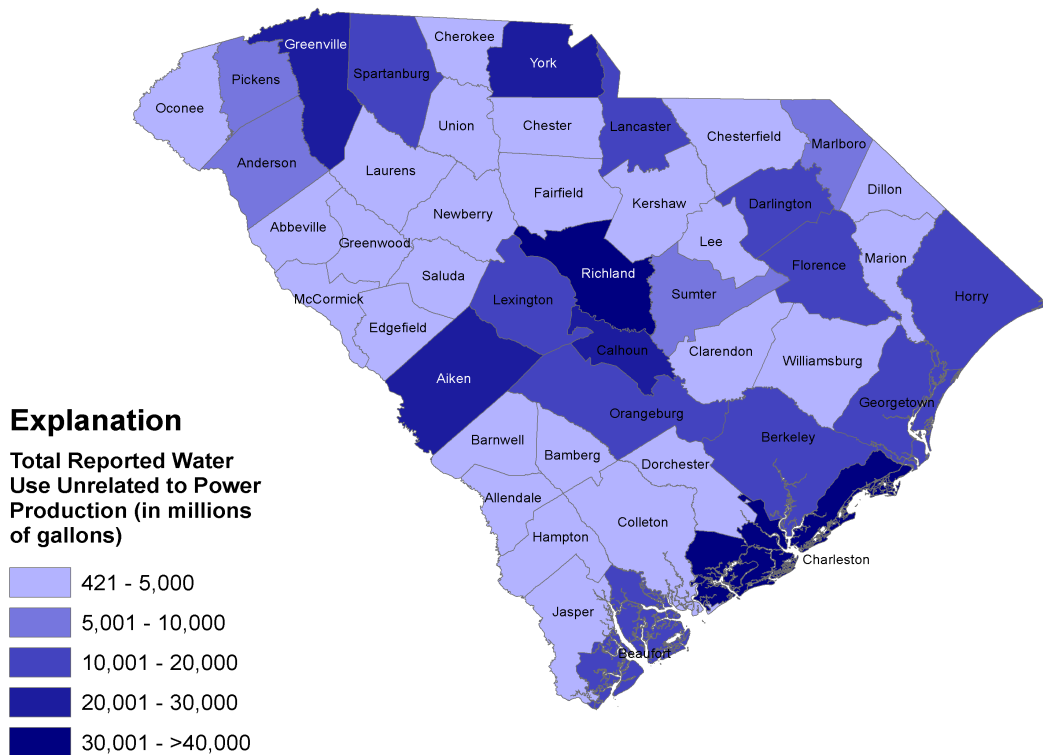
**Figure 6:** Reported Water Use by Category in South Carolina, 2005

### Reported Water Use Excluding Power Production

During 2005, reported water use (excluding power production) totaled more than 405.5 billion gallons with surface water withdrawal accounting for 335.4 billion gallons or approximately 82.7%, and groundwater withdrawal accounting for 70.1 billion gallons or approximately 17.3%. Non-power production-oriented water use accounted for 1.9% of all reported water use in 2005.

	<b>Groundwater</b>	<b>Surface Water</b>	<b>Total</b>	<b>Percentage of Total Non-Power Use</b>
Aquaculture	182.93	227.37	410.31	0.10%
Golf Courses	3,099.41	8,808.68	11,908.10	2.94%
Industrial	11,830.92	140,255.88	152,086.80	37.50%
Irrigation	14,065.22	7,858.81	21,924.04	5.41%
Mining	2,709.77	595.40	3,305.18	0.82%
Other	105.63	NR	105.63	0.03%
Water Supply	38,113.35	177,657.70	215,771.05	53.21%
<b>Total Non-Power Water Use</b>			<b>405,511.10</b>	million gallons

NR = None Reported



**Figure 7:** Distribution of Reported Water Usage Unrelated to Power Production, 2005. Figures in millions of gallons per year.

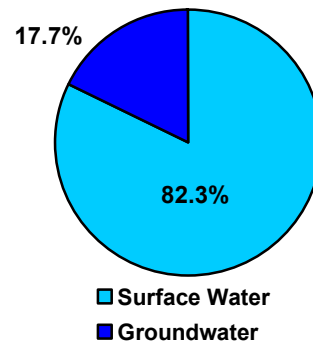
## Water Supply

South Carolina has federally 1,551 defined public water systems, of which 685 are community water systems. The public water systems provide water to 3,450,928 citizens. Water withdrawal for public water supply from 223 reporting suppliers totaled 209.464 billion gallons, with 82 surface water sources accounting for 169.699 billion gallons and 745 groundwater sources accounting for 39.764 billion gallons.

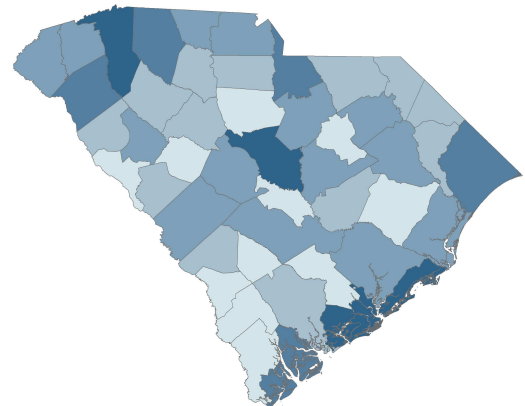
County	Groundwater	Surface Water	County Total
Abbeville	3.31	1,033.64	1,036.95
Aiken	4,786.54	2,395.24	7,181.78
Allendale	383.40	NR	383.40
Anderson	NR	7,664.00	7,664.00
Bamberg	477.66	NR	477.66
Barnwell	830.31	NR	830.31
Beaufort	3,906.87	7,096.70	11,003.57
Berkeley	195.05	5,071.40	5,266.45
Calhoun	133.34	NR	133.34
Charleston	2,398.08	27,901.81	30,299.88
Cherokee	NR	2,561.60	2,561.60
Chester	NR	1,192.20	1,192.20
Chesterfield	851.34	768.53	1,619.87
Clarendon	695.59	NR	695.59
Colleton	731.80	NR	731.80
Darlington	2,361.41	NR	2,361.41
Dillon	1,594.17	NR	1,594.17
Dorchester	655.46	NR	655.46
Edgefield	NR	1,450.00	1,450.00
Fairfield	67.82	568.29	636.12
Florence	3,927.20	1,461.58	5,388.78
Georgetown	853.25	2,268.05	3,121.30
Greenville	34.71	24,125.50	24,160.21
Greenwood	7.93	4,496.20	4,504.13
Hampton	534.26	NR	534.26
Horry	782.16	14,890.15	15,672.31
Jasper	334.03	NR	334.03
Kershaw	624.70	1,711.02	2,335.72
Lancaster	NR	8,081.36	8,081.36
Laurens	NR	1,624.37	1,624.37
Lee	604.46	NR	604.46
Lexington	434.25	5,102.52	5,536.78
Marion	1,315.39	NR	1,315.39
Marlboro	956.03	0.00	956.03
McCormick	NR	388.65	388.65
Newberry	21.63	1,928.53	1,950.16
Oconee	53.88	3,557.52	3,611.40
Orangeburg	625.79	3,153.58	3,779.37
Pickens	NR	3,454.32	3,454.32
Richland	325.04	22,683.18	23,008.22
Saluda	79.02	NR	79.02
Spartanburg	24.85	14,045.89	14,070.74
Sumter	5,921.14	NR	5,921.14
Union	NR	1,200.99	1,200.99
Williamsburg	551.86	NR	551.86
York	29.63	5,780.89	5,810.52

NR = None Reported

Water Supply Use Source Comparison



*Average daily use for any reporting water supply facility (223 total) in 2005 equaled 468,251 gallons of groundwater and 2,182,661 gallons of surface water per day.*



*Distribution of reported water supply water use in South Carolina, 2005. Darker shades indicate the highest use areas.*

	Groundwater	Surface Water
<b>Source Total:</b>	38,113.35	177,657.70

**Total Water Supply Use (millions of gallons):** 215,771.05

## Industrial Use

Water withdrawal for industrial use from 93 reporting industries totaled 152.086 billion gallons, with 52 surface water sources accounting for 140.255 billion gallons and 222 groundwater sources accounting for 11.830 billion gallons. Water use at industrial facilities is predominantly cooling water (contact and non-contact) with return to surface water systems through permitted NPDES discharges.

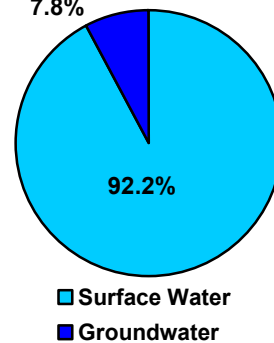
County	Groundwater	Surface Water	County Total
Aiken	1,323.157	20,847.091	22,170.248
Allendale	817.910	NR	817.910
Anderson	NR	89.900	89.900
Beaufort	139.794	NR	139.794
Berkeley	1,200.791	3,110.428	4,311.219
Calhoun	132.610	26,392.680	26,525.290
Charleston	42.456	8,873.806	8,916.262
Cherokee	NR	504.126	504.126
Chester	1.963	94.377	96.340
Darlington	1,488.859	7,036.072	8,524.931
Dorchester	998.879	54.703	1,053.582
Florence	718.343	7,652.703	8,371.046
Georgetown	112.980	12,294.862	12,407.842
Greenville	59.315	NR	59.315
Greenwood	8.000	53.600	61.600
Hampton	488.500	NR	488.500
Horry	160.116	15.880	175.996
Kershaw	499.542	978.150	1,477.692
Lancaster	NR	2,212.771	2,212.771
Lexington	409.109	9,691.832	10,100.941
Marion	NR	NR	0.000
Marlboro	280.237	7,609.400	7,889.637
Oconee	NR	583.026	583.026
Orangeburg	1,044.567	171.420	1,215.987
Pickens	NR	3,279.949	3,279.949
Richland	660.463	10,260.403	10,920.866
Spartanburg	13.673	NR	13.673
Sumter	318.687	NR	318.687
Union	2.780	571.500	574.280
Williamsburg	902.648	NR	902.648
York	5.539	17,877.200	17,882.739

NR = None Reported

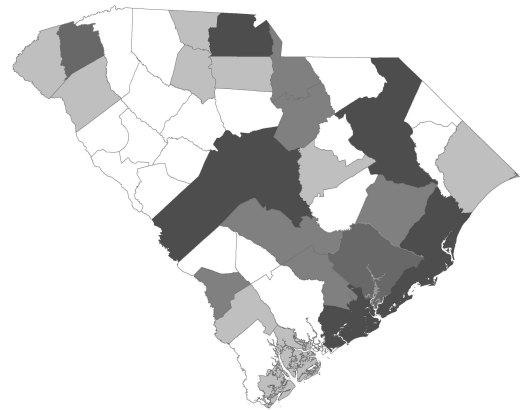
	Groundwater	Surface Water
<b>Source Total:</b>	11,830.92	140,255.88

<b>Total Industrial Use (millions of gallons):</b>	<b>152,086.80</b>
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**Industrial Use Source Comparison**



*Average daily use for any reporting industrial facility (93 total) in 2005 equaled 348,532 gallons of groundwater and 4,131,856 gallons of surface water per day.*



*Distribution of reported industrial water use in South Carolina, 2005. Darker shades indicate the highest use areas.*

## Irrigation Use

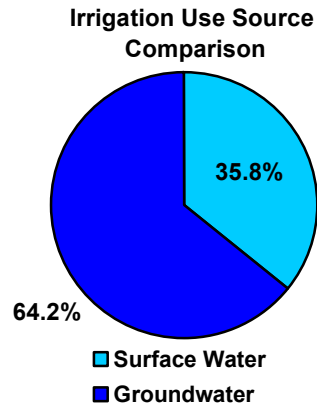
Water withdrawal for irrigation use from 222 reporting entities totaled 21.924 billion gallons, with 491 surface water sources accounting for 7.858 billion gallons and 413 groundwater sources accounting for 14.065 billion gallons.

County	Groundwater	Surface Water	County Total
Aiken	161.33	17.59	178.92
Allendale	2,791.02	156.01	2,947.03
Bamberg	744.07	493.16	1,237.24
Barnwell	112.83	83.84	196.67
Beaufort	659.45	18.29	677.74
Berkeley	0.24	1,110.14	1,110.38
Calhoun	541.10	113.13	654.22
Charleston	0.25	26.99	27.23
Chesterfield	230.03	23.23	253.26
Clarendon	44.83	49.03	93.86
Colleton	756.50	227.00	983.50
Darlington	5.13	221.68	226.80
Dillon	34.40	NR	34.40
Edgefield	21.00	456.05	477.05
Florence	253.64	7.20	260.84
Georgetown	21.80	2,025.72	2,047.52
Greenville	0.40	19.00	19.40
Greenwood	1.20	NR	1.20
Hampton	1,246.03	18.00	1,264.03
Horry	145.60	66.33	211.93
Jasper	425.15	0.00	425.15
Lee	79.86	7.00	86.86
Lexington	1,794.75	513.97	2,308.72
Marion	25.60	0.01	25.61
Marlboro	117.01	74.77	191.78
McCormick	NR	0.00	0.00
Newberry	55.23	122.50	177.73
Oconee	NR	287.75	287.75
Orangeburg	2,664.31	738.56	3,402.87
Pickens	NR	0.00	0.00
Richland	14.69	0.20	14.89
Saluda	NR	367.52	367.52
Spartanburg	NR	105.06	105.06
Sumter	1,117.81	504.40	1,622.22
Williamsburg	NR	2.15	2.15
York	NR	2.55	2.55

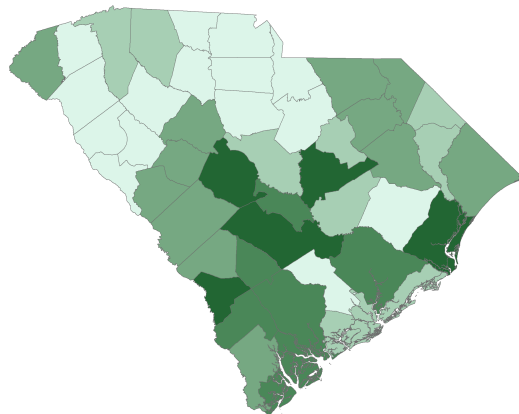
NR = None Reported

	Groundwater	Surface Water
Source Total:	14,065.22	7,858.81

<b>Total Irrigation Use (millions of gallons):</b>	<b>21,924.04</b>
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*Average daily use for any reporting irrigation facility (222 total) in 2005 equaled 173,580 gallons of groundwater and 96,986 gallons of surface water per day.*



*Distribution of reported irrigation water use in South Carolina, 2005. Darker shades indicate the highest use areas.*

## Golf Course Use

Water withdrawal from 248 reporting courses for golf course irrigation totaled 13.230 billion gallons, with 272 surface water sources accounting for 8.808 billion gallons and 262 groundwater sources accounting for 3.099 billion gallons.

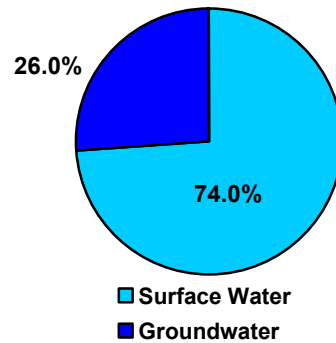
County	Groundwater	Surface Water	County Total
Aiken	13.10	100.33	113.43
Anderson	NR	76.37	76.37
Barnwell	NR	59.62	59.62
Beaufort	1,115.37	1,418.36	2,533.73
Berkeley	19.20	6.42	25.62
Calhoun	28.30	41.10	69.40
Charleston	648.03	199.50	847.52
Chester	22.50	9.00	31.50
Chesterfield	NR	268.48	268.48
Clarendon	5.08	37.90	42.98
Colleton	63.03	1.37	64.40
Darlington	3.00	126.90	129.90
Dorchester	44.00	NR	44.00
Edgefield	43.61	39.00	82.61
Florence	128.95	61.41	190.37
Georgetown	0.00	775.90	775.90
Greenville	30.77	171.35	202.12
Greenwood	10.20	59.54	69.74
Hampton	34.75	NR	34.75
Horry	587.00	2,899.80	3,486.80
Kershaw	39.52	54.80	94.32
Lancaster	0.73	8.92	9.65
Laurens	NR	84.08	84.08
Lexington	28.95	173.59	202.54
Marion	0.00	21.31	21.31
McCormick	NR	32.65	32.65
Newberry	12.00	6.00	18.00
Oconee	NR	86.50	86.50
Orangeburg	18.67	90.77	109.45
Pickens	NR	229.76	229.76
Richland	24.53	320.87	345.40
Spartanburg	10.51	1,009.38	1,019.89
Sumter	120.57	175.31	295.87
Union	NR	9.00	9.00
York	47.06	153.41	200.47

NR = None Reported

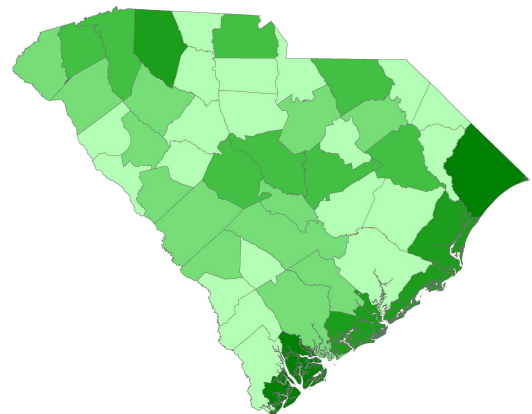
	Groundwater	Surface Water
<b>Source Total:</b>	3,099.41	8,808.68

<b>Total Golf Course Use (million gallons):</b>	<b>11,908.10</b>
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**Golf Course Use Source Comparison**



*Average daily use for any reporting golf course (248 total) in 2005 equaled 34,240 gallons of groundwater and 97,311 gallons of surface water per day.*



*Distribution of reported golf course water use in South Carolina, 2005. Darker shades indicate the highest use areas.*



## Mining Use

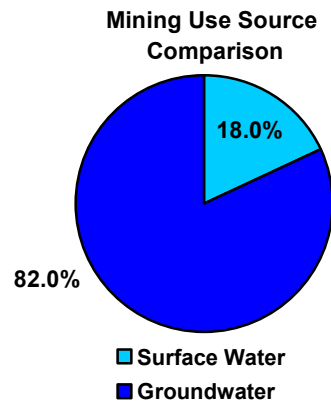
Water withdrawal associated with mining activities at 12 reporting facilities totaled 3.305 billion gallons, with 10 surface water sources accounting for 595.40 million gallons and 7 groundwater sources accounting for 2.709.77 billion gallons.

County	Groundwater	Surface Water	County Total
Aiken	21.310	NR	21.310
Berkeley	2.982	NR	2.982
Colleton	NR	2.164	2.164
Horry	NR	177.600	177.600
Lexington	446.870	415.640	862.510
Orangeburg	1,909.200	NR	1,909.200
Richland	312.850	NR	312.850
York	16.560	NR	16.560

NR = None Reported

	Groundwater	Surface Water
<b>Source Total:</b>	2,709.772	595.404

<b>Total Irrigation Use (million gallons):</b>	<b>3,305.176</b>
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## Aquaculture Use

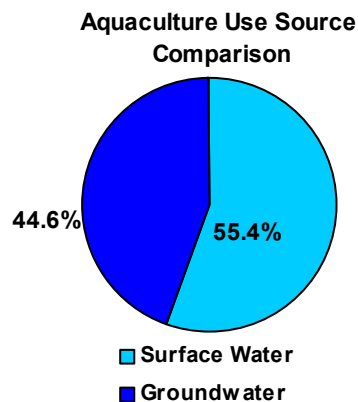
Water withdrawal from 9 reporting aquaculture-farming facilities totaled 0.410 billion gallons, with 8 surface water sources accounting for 227.37 million gallons and 11 groundwater sources accounting for 182.93 million gallons.

County	Groundwater	Surface Water	County Total
Beaufort	9.273	63.037	72.310
Berkeley	3.277	99.695	102.972
Charleston	NR	2.300	2.300
Dillon	35.600	NR	35.600
Hampton	122.283	NR	122.283
Richland	12.500	27.300	39.800
Spartanburg	NR	35.040	35.040

NR = None Reported

	Groundwater	Surface Water
<b>Source Total:</b>	182.933	227.372

<b>Total Aquaculture Use (million gallons):</b>	<b>410.305</b>
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## Other Use

Water withdrawal for other, non-specific use from 5 reporting facilities totaled 105.63 million gallons, with groundwater withdrawn from 29 sources accounting for all reported use.

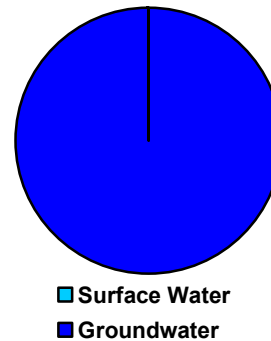
<b>County</b>	<b>Groundwater</b>	<b>Surface Water</b>	<b>County Total</b>
Beaufort	34.760	NR	34.760
Charleston	1.564	NR	1.564
Darlington	0.465	NR	0.465
Dorchester	0.989	NR	0.989
Horry	67.856	NR	67.856

NR = None Reported

	<b>Groundwater</b>	<b>Surface Water</b>
<b>Source Total:</b>	105.634	NR

<b>Total Other Use (million gallons):</b>	<b>105.634</b>
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**Other Use Source  
Comparison**



## Appendix A: Surface and Groundwater Use Summary Tables

**Surface Water Use Summary Table (Figures in Millions of Gallons)**

County	County Total	Hydroelectric	Thermoelectric	Aquaculture	Golf Course	Industry	Irrigation	Mining	Water Supply
Abbeville	38,719.64	37,686.00	NR	NR	NR	NR	NR	NR	1,033.64
Aiken	68,905.24	NR	45,545.00	NR	100.33	20,847.09	17.59	NR	2,395.24
Allendale	156.01	NR	NR	NR	NR	NR	156.01	NR	NR
Anderson	248,574.47	191,000.00	49,744.21	NR	76.37	89.90	NR	NR	7,664.00
Bamberg	493.16	NR	NR	NR	NR	NR	493.16	NR	NR
Barnwell	143.46	NR	NR	NR	59.62	NR	83.84	NR	NR
Beaufort	8,596.38	NR	NR	63.04	1,418.36	NR	18.29	NR	7,096.70
Berkeley	1,464,560.78	1,251,619.01	203,543.69	99.70	6.42	3,110.43	1,110.14	NR	5,071.40
Calhoun	26,546.91	NR	NR	NR	41.10	26,392.68	113.13	NR	NR
Charleston	37,004.39	NR	NR	2.30	199.50	8,873.81	26.99	NR	27,901.81
Cherokee	410,583.73	407,518.00	NR	NR	NR	504.13	NR	NR	2,561.60
Chester	2,068,769.58	2,067,474.00	NR	NR	9.00	94.38	NR	NR	1,192.20
Chesterfield	1,060.24	NR	NR	NR	268.48	NR	23.23	NR	768.53
Clarendon	86.93	NR	NR	NR	37.90	NR	49.03	NR	NR
Colleton	1,715.07	NR	1,484.53	NR	1.37	NR	227.00	2.16	NR
Darlington	284,730.65	NR	277,346.00	NR	126.90	7,036.07	221.68	NR	NR
Dorchester	54.70	NR	NR	NR	0.00	54.70	NR	NR	NR
Edgefield	1,151,998.50	1,150,053.45	NR	NR	39.00	NR	456.05	NR	1,450.00
Fairfield	3,506,339.36	2,944,701.12	561,069.95	NR	NR	NR	NR	NR	568.29
Florence	9,182.90	NR	NR	NR	61.41	7,652.70	7.20	NR	1,461.58
Georgetown	21,688.77	NR	4,324.25	NR	775.90	12,294.86	2,025.72	NR	2,268.05
Greenville	24,315.85	0.00	NR	NR	171.35	NR	19.00	NR	24,125.50
Greenwood	368,126.34	363,517.00	0.00	NR	59.54	53.60	NR	NR	4,496.20
Hampton	18.00	NR	NR	NR	NR	NR	18.00	NR	NR
Horry	62,792.63	NR	44,742.87	NR	2,899.80	15.88	66.33	177.60	14,890.15
Jasper	0.00	NR	NR	NR	NR	NR	0.00	NR	NR
Kershaw	1,245,174.97	1,242,431.00	NR	NR	54.80	978.15	NR	NR	1,711.02
Lancaster	1,214,501.04	1,204,198.00	NR	NR	8.92	2,212.77	NR	NR	8,081.36
Laurens	121,708.45	120,000.00	NR	NR	84.08	NR	NR	NR	1,624.37
Lee	7.00	NR	NR	NR	NR	NR	7.00	NR	NR
Lexington	443,393.01	371,476.55	56,018.90	NR	173.59	9,691.83	513.97	415.64	5,102.52
Marion	21.31	NR	NR	NR	21.31	NR	0.01	NR	NR
Marlboro	7,684.17	NR	NR	NR	NR	7,609.40	74.77	NR	0.00
McCormick	421.30	NR	NR	NR	32.65	NR	0.00	NR	388.65
Newberry	2,057.03	NR	NR	NR	6.00	NR	122.50	NR	1,928.53
Oconee	2,832,062.80	12,700.00	2,814,848.00	NR	86.50	583.03	287.75	NR	3,557.52
Orangeburg	4,154.34	NR	0.00	NR	90.77	171.42	738.56	NR	3,153.58
Pickens	2,776,706.04	2,769,742.00	NR	NR	229.76	3,279.95	0.00	NR	3,454.32
Richland	661,562.56	469,660.89	158,609.72	27.30	320.87	10,260.40	0.20	NR	22,683.18
Saluda	367.52	NR	NR	NR	NR	NR	367.52	NR	NR
Spartanburg	33,158.09	17,962.72	NR	35.04	1,009.38	NR	105.06	NR	14,045.89
Sumter	679.71	NR	NR	NR	175.31	NR	504.40	NR	NR
Union	188,443.50	186,662.01	NR	NR	9.00	571.50	NR	NR	1,200.99
Williamsburg	2.15	NR	NR	NR	NR	NR	2.15	NR	NR
York	1,019,463.06	958,465.00	37,184.00	NR	153.41	17,877.20	2.55	NR	5,780.89
<b>Grand Total:</b>	<b>20,356,731.72</b>	<b>15,766,86.75</b>	<b>4,254,461.12</b>	<b>227.37</b>	<b>8,808.68</b>	<b>140,255.88</b>	<b>7,858.81</b>	<b>595.40</b>	<b>177,657.70</b>

NR = None Reported

**Groundwater Use Summary Table (Figures in Millions of Gallons)**

County	County Total	Hydroelectric	Thermoelectric	Aquaculture	Golf Course	Industry	Irrigation	Mining	Other	Water Supply
Abbeville	3.31	NR	NR	NR	NR	NR	NR	NR	NR	3.31
Aiken	6305.436	NR	NR	NR	13.1	1323.157	161.33	21.31	NR	4786.539
Allendale	3992.331	NR	NR	NR	NR	817.91	2791.018	NR	NR	383.403
Bamberg	1221.734	NR	NR	NR	NR	NR	744.073	NR	NR	477.661
Barnwell	943.142	NR	NR	NR	NR	NR	112.831	NR	NR	830.311
Beaufort	5865.52	NR	NR	9.273	1115.368	139.794	659.452	NR	34.76	3906.873
Berkeley	1434.151	0.329	12.283	3.277	19.2	1200.791	0.24	2.982	NR	195.049
Calhoun	835.351	NR	NR	NR	28.3	132.61	541.097	NR	NR	133.344
Charleston	3090.368	NR	NR	NR	648.027	42.456	0.245	NR	1.564	2398.076
Cherokee	1.022	NR	1.022	NR	NR	NR	NR	NR	NR	NR
Chester	24.463	NR	NR	NR	22.5	1.963	NR	NR	NR	NR
Chesterfield	1081.367	NR	NR	NR	NR	NR	230.032	0	NR	851.335
Clarendon	745.499	NR	NR	NR	5.08	NR	44.825	NR	NR	695.594
Colleton	1552.005	NR	0.677	NR	63.027	NR	756.5	NR	NR	731.801
Darlington	4221.139	NR	362.284	NR	3	1488.859	5.125	NR	0.465	2361.406
Dillon	1664.173	NR	NR	35.6	NR	NR	34.4	NR	NR	1594.173
Dorchester	1699.324	NR	NR	NR	44	998.879	NR	NR	0.989	655.456
Edgefield	64.605	NR	NR	NR	43.605	NR	21	NR	NR	NR
Fairfield	67.823	NR	NR	NR	NR	NR	NR	NR	NR	67.823
Florence	5028.126	NR	NR	NR	128.951	718.343	253.637	NR	NR	3927.195
Georgetown	988.028	NR	NR	NR	0	112.98	21.797	NR	NR	853.251
Greenville	125.195	NR	NR	NR	30.773	59.315	0.4	NR	NR	34.707
Greenwood	27.328	NR	NR	NR	10.2	8	1.2	NR	NR	7.928
Hampton	2425.814	NR	NR	122.283	34.75	488.5	1246.025	NR	NR	534.256
Horry	1742.73	NR	NR	NR	586.996	160.116	145.598	NR	67.856	782.164
Jasper	759.179	NR	NR	0	NR	NR	425.146	NR	NR	334.033
Kershaw	1163.758	NR	NR	NR	39.52	499.542	NR	NR	NR	624.696
Lancaster	0.734	NR	NR	NR	0.734	NR	NR	NR	NR	NR
Lee	684.318	NR	NR	NR	NR	NR	79.858	NR	NR	604.46
Lexington	3113.93	NR	NR	NR	28.95	409.109	1794.748	446.87	NR	434.253
Marion	1340.989	NR	NR	NR	0	NR	25.6	NR	NR	1315.389
Marlboro	1353.281	NR	NR	NR	NR	280.237	117.01	NR	NR	956.034
Newberry	88.853	NR	NR	NR	12	NR	55.228	NR	NR	21.625
Oconee	53.88	NR	NR	NR	NR	NR	NR	NR	NR	53.88
Orangeburg	7929.589	NR	1667.052	NR	18.672	1044.567	2664.31	1909.2	NR	625.788
Richland	1350.066	NR	NR	12.5	24.53	660.463	14.686	312.85	NR	325.037
Saluda	79.02	NR	NR	NR	NR	NR	NR	NR	NR	79.02
Spartanburg	49.032	NR	NR	NR	10.51	13.673	NR	NR	NR	24.849
Sumter	7478.204	NR	NR	NR	120.565	318.687	1117.811	NR	NR	5921.141
Union	2.78	NR	NR	NR	NR	2.78	NR	NR	NR	NR
Williamsburg	1454.508	NR	NR	NR	NR	902.648	NR	NR	NR	551.86
York	98.784	NR	NR	NR	47.055	5.539	NR	16.56	NR	29.63
<b>Grand Total:</b>	<b>72,150.89</b>	<b>0.33</b>	<b>2,043.32</b>	<b>182.93</b>	<b>3,099.41</b>	<b>11,830.92</b>	<b>14,065.22</b>	<b>2,709.77</b>	<b>105.63</b>	<b>38,113.35</b>

NR = None Reported

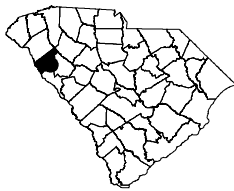
## **Appendix B: Surface and Groundwater Use Summary by County in South Carolina, 2005**

The following tables list reported surface water and groundwater withdrawals for the 2005 calendar year by county. Water usage data are shown by water use category, and in the case of power generation, include surface water use that is typically considered non-consumptive. As presented throughout this report, all water use figures presented are in millions of gallons.

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**Abbeville County**

---

**Groundwater Use**

Aquaculture:	NR
Golf Course:	NR
Industrial:	NR
Irrigation:	NR
Mining:	NR
Water Supply:	3.31
Other:	NR
<b>Total:</b>	<b>3.31</b>

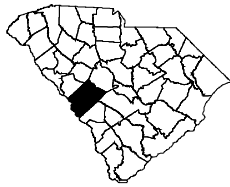
**Surface Water Use**

Aquaculture:	NR
Golf Course:	NR
Hydroelectric:	37,686.30
Industrial:	NR
Irrigation:	NR
Mining:	NR
Thermal Power:	NR
Water Supply:	1,033.64
<b>Total:</b>	<b>38,719.64</b>

---

**Aiken County**

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**Groundwater Use**

Aquaculture:	NR
Golf Course:	13.10
Industrial:	1323.16
Irrigation:	161.33
Mining:	21.31
Water Supply:	4786.54
Other:	NR
<b>Total:</b>	<b>6,305.44</b>

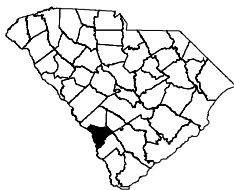
**Surface Water Use**

Aquaculture:	NR
Golf Course:	100.33
Hydroelectric:	NR
Industrial:	20,847.09
Irrigation:	17.585
Mining:	NR
Thermal Power:	45,545
Water Supply:	2,395.24
<b>Total:</b>	<b>68,905.24</b>

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**Allendale County**

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**Groundwater Use**

Aquaculture:	NR
Golf Course:	NR
Industrial:	817.91
Irrigation:	2,791.02
Mining:	NR
Water Supply:	383.40
Other:	NR
<b>Total:</b>	<b>3,992.33</b>

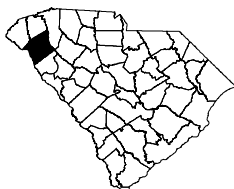
**Surface Water Use**

Aquaculture:	NR
Golf Course:	NR
Hydroelectric:	NR
Industrial:	NR
Irrigation:	156.01
Mining:	NR
Thermal Power:	NR
Water Supply:	NR
<b>Total:</b>	<b>156.01</b>

---

**Anderson County**

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**Groundwater Use**

Aquaculture:	NR
Golf Course:	NR
Industrial:	NR
Irrigation:	NR
Mining:	NR
Water Supply:	NR
Other:	NR
<b>Total:</b>	<b>NR</b>

**Surface Water Use**

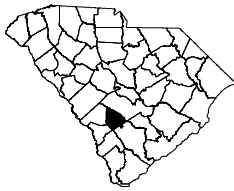
Aquaculture:	NR
Golf Course:	76.37
Hydroelectric:	191,000
Industrial:	89.9
Irrigation:	NR
Mining:	NR
Thermal Power:	49,744.21
Water Supply:	7,663.995
<b>Total:</b>	<b>248,574.47</b>

*NR = None Reported*

---

**Bamberg County**

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**Groundwater Use**

Aquaculture:	NR
Golf Course:	NR
Industrial:	NR
Irrigation:	744.07
Mining:	NR
Water Supply:	477.661
Other:	NR
<b>Total:</b>	<b>1,221.73</b>

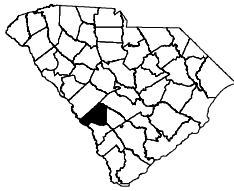
**Surface Water Use**

Aquaculture:	NR
Golf Course:	NR
Hydroelectric:	NR
Industrial:	NR
Irrigation:	493.16
Mining:	NR
Thermal Power:	NR
Water Supply:	NR
<b>Total:</b>	<b>493.16</b>

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**Barnwell County**

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**Groundwater Use**

Aquaculture:	NR
Golf Course:	NR
Industrial:	NR
Irrigation:	112.83
Mining:	NR
Water Supply:	830.31
Other:	NR
<b>Total:</b>	<b>943.14</b>

**Surface Water Use**

Aquaculture:	NR
Golf Course:	59.62
Hydroelectric:	NR
Industrial:	NR
Irrigation:	83.84
Mining:	NR
Thermal Power:	NR
Water Supply:	NR
<b>Total:</b>	<b>143.46</b>

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**Beaufort County**

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**Groundwater Use**

Aquaculture:	9.27
Golf Course:	1,115.37
Industrial:	139.794
Irrigation:	659.45
Mining:	NR
Water Supply:	3906.87
Other:	34.76
<b>Total:</b>	<b>5,865.52</b>

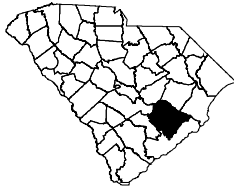
**Surface Water Use**

Aquaculture:	63.04
Golf Course:	1,418.36
Hydroelectric:	NR
Industrial:	NR
Irrigation:	18.29
Mining:	NR
Thermal Power:	NR
Water Supply:	7096.70
<b>Total:</b>	<b>8,596.38</b>

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**Berkeley County**

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**Groundwater Use**

Aquaculture:	3.28
Golf Course:	19.20
Industrial:	1,200.79
Irrigation:	0.24
Mining:	2.98
Water Supply:	195.05
Hydroelectric:	0.33
Thermal Power:	12.28
<b>Total:</b>	<b>1,434.15</b>

**Surface Water Use**

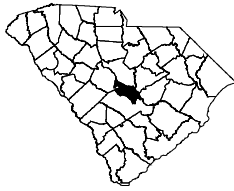
Aquaculture:	99.70
Golf Course:	6.42
Hydroelectric:	1,251,619.01
Industrial:	3110.43
Irrigation:	1110.14
Mining:	NR
Thermal Power:	203,543.69
Water Supply:	5,071.4
<b>Total:</b>	<b>1,464,560.78</b>

*NR = None Reported*

---

**Calhoun County**

---

**Groundwater Use**

Aquaculture:	NR
Golf Course:	28.30
Industrial:	132.61
Irrigation:	541.097
Mining:	NR
Water Supply:	133.34
Other:	NR
<b>Total:</b>	<b>835.35</b>

**Surface Water Use**

Aquaculture:	NR
Golf Course:	41.10
Hydroelectric:	NR
Industrial:	26,392.68
Irrigation:	113.125
Mining:	NR
Thermal Power:	NR
Water Supply:	NR
<b>Total:</b>	<b>26,546.91</b>

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**Charleston County**

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**Groundwater Use**

Aquaculture:	NR
Golf Course:	648.03
Industrial:	42.46
Irrigation:	0.25
Mining:	NR
Water Supply:	2398.07
Other:	1.56
<b>Total:</b>	<b>3,090.37</b>

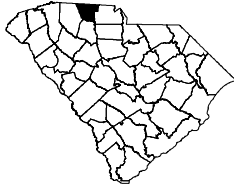
**Surface Water Use**

Aquaculture:	2.30
Golf Course:	199.49
Hydroelectric:	NR
Industrial:	8,873.81
Irrigation:	26.99
Mining:	NR
Thermal Power:	NR
Water Supply:	27,901.80
<b>Total:</b>	<b>37,004.39</b>

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**Cherokee County**

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**Groundwater Use**

Aquaculture:	NR
Golf Course:	NR
Industrial:	NR
Irrigation:	NR
Mining:	NR
Water Supply:	NR
Thermal Power:	1.02
<b>Total:</b>	<b>1.02</b>

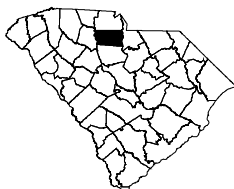
**Surface Water Use**

Aquaculture:	NR
Golf Course:	NR
Hydroelectric:	407,518.00
Industrial:	504.13
Irrigation:	NR
Mining:	NR
Thermal Power:	NR
Water Supply:	2,561.6
<b>Total:</b>	<b>410,583.73</b>

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**Chester County**

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**Groundwater Use**

Aquaculture:	NR
Golf Course:	22.50
Industrial:	1.96
Irrigation:	NR
Mining:	NR
Water Supply:	NR
Other:	NR
<b>Total:</b>	<b>24.46</b>

**Surface Water Use**

Aquaculture:	NR
Golf Course:	9.00
Hydroelectric:	2,067,474.00
Industrial:	94.38
Irrigation:	NR
Mining:	NR
Thermal Power:	NR
Water Supply:	1192.2
<b>Total:</b>	<b>2,068,769.58</b>

*NR = None Reported*





### Chesterfield County

#### Groundwater Use

Aquaculture:	NR
Golf Course:	NR
Industrial:	NR
Irrigation:	230.03
Mining:	NR
Water Supply:	851.34
Other:	NR
<b>Total:</b>	<b>1,081.37</b>

#### Surface Water Use

Aquaculture:	NR
Golf Course:	268.48
Hydroelectric:	NR
Industrial:	NR
Irrigation:	23.23
Mining:	NR
Thermal Power:	NR
Water Supply:	768.53
<b>Total:</b>	<b>1,060.24</b>



### Clarendon County

#### Groundwater Use

Aquaculture:	NR
Golf Course:	5.08
Industrial:	NR
Irrigation:	44.83
Mining:	NR
Water Supply:	695.59
Other:	NR
<b>Total:</b>	<b>745.50</b>

#### Surface Water Use

Aquaculture:	NR
Golf Course:	37.90
Hydroelectric:	NR
Industrial:	NR
Irrigation:	49.03
Mining:	NR
Thermal Power:	NR
Water Supply:	NR
<b>Total:</b>	<b>86.93</b>



### Colleton County

#### Groundwater Use

Aquaculture:	NR
Golf Course:	63.03
Industrial:	NR
Irrigation:	756.50
Mining:	NR
Water Supply:	731.80
Thermal Power:	0.68
Other:	NR
<b>Total:</b>	<b>1,552.01</b>

#### Surface Water Use

Aquaculture:	NR
Golf Course:	1.37
Hydroelectric:	NR
Industrial:	NR
Irrigation:	227.00
Mining:	2.16
Thermal Power:	1,484.53
Water Supply:	NR
<b>Total:</b>	<b>1,715.07</b>



### Darlington County

#### Groundwater Use

Aquaculture:	NR
Golf Course:	3.00
Industrial:	1,488.86
Irrigation:	5.13
Mining:	NR
Nuclear Power:	362.28
Water Supply:	2505.969
Other:	0.47
<b>Total:</b>	<b>4,221.14</b>

#### Surface Water Use

Aquaculture:	NR
Golf Course:	126.90
Hydroelectric:	NR
Industrial:	7,036.07
Irrigation:	221.68
Mining:	NR
Nuclear Power:	277,346.00
Water Supply:	NR
<b>Total:</b>	<b>284,730.65</b>

NR = None Reported



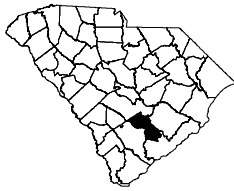
### Dillon County

#### Groundwater Use

Aquaculture:	35.60
Golf Course:	NR
Industrial:	NR
Irrigation:	34.40
Mining:	NR
Water Supply:	1,594.17
Other:	NR
<b>Total:</b>	<b>1,664.17</b>

#### Surface Water Use

Aquaculture:	NR
Golf Course:	NR
Hydroelectric:	NR
Industrial:	NR
Irrigation:	NR
Mining:	NR
Thermal Power:	NR
Water Supply:	NR
<b>Total:</b>	<b>NR</b>



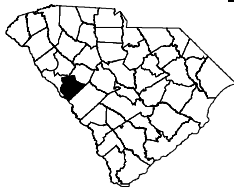
### Dorchester County

#### Groundwater Use

Aquaculture:	NR
Golf Course:	44.00
Industrial:	998.88
Irrigation:	NR
Mining:	NR
Water Supply:	655.46
Other:	.99
<b>Total:</b>	<b>1,699.32</b>

#### Surface Water Use

Aquaculture:	NR
Golf Course:	NR
Hydroelectric:	NR
Industrial:	54.70
Irrigation:	NR
Mining:	NR
Thermal Power:	NR
Water Supply:	NR
<b>Total:</b>	<b>54.70</b>



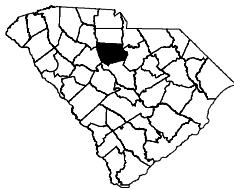
### Edgefield County

#### Groundwater Use

Aquaculture:	NR
Golf Course:	43.61
Industrial:	NR
Irrigation:	21.000
Mining:	NR
Water Supply:	NR
Other:	NR
<b>Total:</b>	<b>64.61</b>

#### Surface Water Use

Aquaculture:	NR
Golf Course:	39.00
Hydroelectric:	1,150,053.45
Industrial:	NR
Irrigation:	456.05
Mining:	NR
Thermal Power:	NR
Water Supply:	1450.00
<b>Total:</b>	<b>1,151,998.50</b>



### Fairfield County

#### Groundwater Use

Aquaculture:	NR
Golf Course:	NR
Industrial:	NR
Irrigation:	NR
Mining:	NR
Water Supply:	67.82
Other:	NR
<b>Total:</b>	<b>67.82</b>

#### Surface Water Use

Aquaculture:	NR
Golf Course:	NR
Hydroelectric:	2,944,701.12
Industrial:	NR
Irrigation:	NR
Mining:	NR
Nuclear Power:	561,069.95
Water Supply:	568.29
<b>Total:</b>	<b>3,506,339.36</b>

*NR = None Reported*



### Florence County

#### Groundwater Use

Aquaculture:	NR
Golf Course:	128.95
Industrial:	718.34
Irrigation:	253.64
Mining:	NR
Water Supply:	3,927.20
Other:	NR
<b>Total:</b>	<b>5,028.13</b>

#### Surface Water Use

Aquaculture:	NR
Golf Course:	61.41
Hydroelectric:	NR
Industrial:	7,652.70
Irrigation:	7.20
Mining:	NR
Thermal Power:	NR
Water Supply:	1,461.58
<b>Total:</b>	<b>9,182.90</b>



### Georgetown County

#### Groundwater Use

Aquaculture:	NR
Golf Course:	NR
Industrial:	112.98
Irrigation:	21.80
Mining:	NR
Water Supply:	853.25
Other:	NR
<b>Total:</b>	<b>988.03</b>

#### Surface Water Use

Aquaculture:	NR
Golf Course:	775.90
Hydroelectric:	NR
Industrial:	12,294.86
Irrigation:	2,025.72
Mining:	NR
Thermal Power:	4,324.25
Water Supply:	2,268.05
<b>Total:</b>	<b>21,688.77</b>



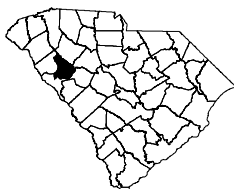
### Greenville County

#### Groundwater Use

Aquaculture:	NR
Golf Course:	30.77
Industrial:	59.32
Irrigation:	NR
Mining:	NR
Water Supply:	34.70
Other:	NR
<b>Total:</b>	<b>125.20</b>

#### Surface Water Use

Aquaculture:	NR
Golf Course:	171.35
Hydroelectric:	NR
Industrial:	NR
Irrigation:	19.00
Mining:	NR
Thermal Power:	NR
Water Supply:	24,125.5
<b>Total:</b>	<b>24,315.85</b>



### Greenwood County

#### Groundwater Use

Aquaculture:	NR
Golf Course:	10.20
Industrial:	8.00
Irrigation:	1.200
Mining:	NR
Water Supply:	7.93
Other:	NR
<b>Total:</b>	<b>27.33</b>

#### Surface Water Use

Aquaculture:	NR
Golf Course:	59.54
Hydroelectric:	363,517.00
Industrial:	53.60
Irrigation:	NR
Mining:	NR
Thermal Power:	NR
Water Supply:	4,496.20
<b>Total:</b>	<b>368,126.34</b>

NR = None Reported

### Hampton County



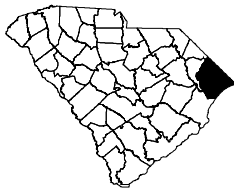
#### Groundwater Use

Aquaculture:	122.28
Golf Course:	34.75
Industrial:	488.50
Irrigation:	1,246.03
Mining:	NR
Water Supply:	534.26
Other:	NR
<b>Total:</b>	<b>2,425.81</b>

#### Surface Water Use

Aquaculture:	NR
Golf Course:	NR
Hydroelectric:	NR
Industrial:	NR
Irrigation:	18.00
Mining:	NR
Thermal Power:	NR
Water Supply:	NR
<b>Total:</b>	<b>18.00</b>

### Horry County



#### Groundwater Use

Aquaculture:	NR
Golf Course:	586.00
Industrial:	160.12
Irrigation:	145.60
Mining:	NR
Water Supply:	782.164
Other:	67.86
<b>Total:</b>	<b>1,742.73</b>

#### Surface Water Use

Aquaculture:	NR
Golf Course:	2,899.80
Hydroelectric:	NR
Industrial:	15.88
Irrigation:	66.33
Mining:	177.60
Thermal Power:	44,742.87
Water Supply:	14,890.15
<b>Total:</b>	<b>62,792.63</b>

### Jasper County



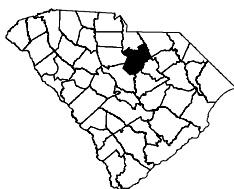
#### Groundwater Use

Aquaculture:	NR
Golf Course:	NR
Industrial:	NR
Irrigation:	425.146
Mining:	NR
Water Supply:	334.03
Other:	NR
<b>Total:</b>	<b>759.18</b>

#### Surface Water Use

Aquaculture:	NR
Golf Course:	NR
Hydroelectric:	NR
Industrial:	NR
Irrigation:	NR
Mining:	NR
Thermal Power:	NR
Water Supply:	NR
<b>Total:</b>	<b>NR</b>

### Kershaw County



#### Groundwater Use

Aquaculture:	NR
Golf Course:	39.52
Industrial:	499.54
Irrigation:	NR
Mining:	NR
Water Supply:	624.70
Other:	NR
<b>Total:</b>	<b>1,163.76</b>

#### Surface Water Use

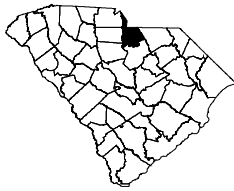
Aquaculture:	NR
Golf Course:	54.80
Hydroelectric:	1,242,431.00
Industrial:	978.15
Irrigation:	NR
Mining:	NR
Thermal Power:	NR
Water Supply:	1,711.02
<b>Total:</b>	<b>1,245,174.97</b>

NR = None Reported

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**Lancaster County**

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**Groundwater Use**

Aquaculture:	NR
Golf Course:	0.73
Industrial:	NR
Irrigation:	NR
Mining:	NR
Water Supply:	NR
Other:	NR
<b>Total:</b>	<b>0.73</b>

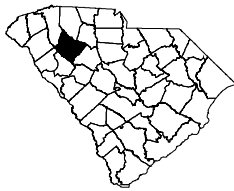
**Surface Water Use**

Aquaculture:	NR
Golf Course:	8.92
Hydroelectric:	1,204,198.00
Industrial:	2,212.77
Irrigation:	NR
Mining:	NR
Thermal Power:	NR
Water Supply:	8,081.36
<b>Total:</b>	<b>1,214,501.04</b>

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**Laurens County**

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**Groundwater Use**

Aquaculture:	NR
Golf Course:	NR
Industrial:	NR
Irrigation:	NR
Mining:	NR
Water Supply:	NR
Other:	NR
<b>Total:</b>	<b>NR</b>

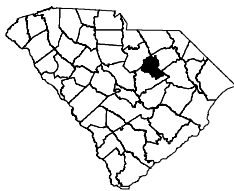
**Surface Water Use**

Aquaculture:	NR
Golf Course:	84.08
Hydroelectric:	120,000
Industrial:	NR
Irrigation:	NR
Mining:	NR
Thermal Power:	NR
Water Supply:	1,624.37
<b>Total:</b>	<b>121,708.45</b>

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**Lee County**

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**Groundwater Use**

Aquaculture:	NR
Golf Course:	NR
Industrial:	NR
Irrigation:	79.86
Mining:	NR
Water Supply:	604.46
Other:	NR
<b>Total:</b>	<b>684.32</b>

**Surface Water Use**

Aquaculture:	NR
Golf Course:	NR
Hydroelectric:	NR
Industrial:	NR
Irrigation:	7.00
Mining:	NR
Thermal Power:	NR
Water Supply:	NR
<b>Total:</b>	<b>7.00</b>

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**Lexington County**

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**Groundwater Use**

Aquaculture:	NR
Golf Course:	28.95
Industrial:	409.11
Irrigation:	1,794.75
Mining:	446.87
Water Supply:	434.25
Other:	NR
<b>Total:</b>	<b>3,113.93</b>

**Surface Water Use**

Aquaculture:	NR
Golf Course:	173.59
Hydroelectric:	371,476.55
Industrial:	9,691.83
Irrigation:	513.97
Mining:	415.64
Thermal Power:	56018.9
Water Supply:	5,102.52
<b>Total:</b>	<b>443,393.01</b>

*NR = None Reported*

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**Marion County**

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**Groundwater Use**

Aquaculture:	NR
Golf Course:	NR
Industrial:	NR
Irrigation:	25.60
Mining:	NR
Water Supply:	1,315.39
Other:	NR
<b>Total:</b>	<b>1,340.99</b>

**Surface Water Use**

Aquaculture:	NR
Golf Course:	21.31
Hydroelectric:	NR
Industrial:	NR
Irrigation:	0.001
Mining:	NR
Thermal Power:	NR
Water Supply:	NR
<b>Total:</b>	<b>21.31</b>

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**Marlboro County**

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**Groundwater Use**

Aquaculture:	NR
Golf Course:	NR
Industrial:	280.24
Irrigation:	117.01
Mining:	NR
Water Supply:	956.03
Other:	NR
<b>Total:</b>	<b>1,353.28</b>

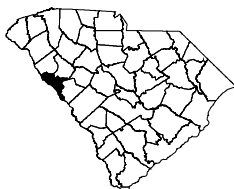
**Surface Water Use**

Aquaculture:	NR
Golf Course:	NR
Hydroelectric:	NR
Industrial:	7,609.4
Irrigation:	74.77
Mining:	NR
Thermal Power:	NR
Water Supply:	NR
<b>Total::</b>	<b>7,684.17</b>

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**McCormick County**

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**Groundwater Use**

Aquaculture:	NR
Golf Course:	NR
Industrial:	NR
Irrigation:	NR
Mining:	NR
Water Supply:	NR
Other:	NR
<b>Total:</b>	<b>NR</b>

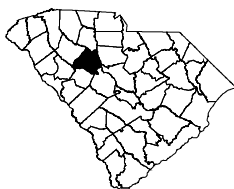
**Surface Water Use**

Aquaculture:	NR
Golf Course:	32.65
Hydroelectric:	NR
Industrial:	NR
Irrigation:	NR
Mining:	NR
Thermal Power:	NR
Water Supply:	388.65
<b>Total:</b>	<b>421.30</b>

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**Newberry County**

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**Groundwater Use**

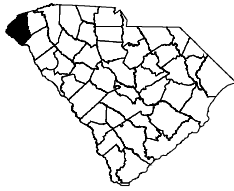
Aquaculture:	NR
Golf Course:	12.00
Industrial:	NR
Irrigation:	55.23
Mining:	NR
Water Supply:	21.63
Other:	NR
<b>Total:</b>	<b>88.85</b>

**Surface Water Use**

Aquaculture:	NR
Golf Course:	6.00
Hydroelectric:	NR
Industrial:	NR
Irrigation:	122.50
Mining:	NR
Thermal Power:	NR
Water Supply:	1,928.53
<b>Total:</b>	<b>2,057.03</b>

*NR = None Reported*

### Oconee County



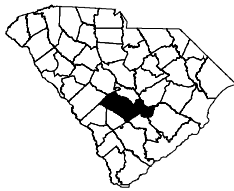
#### Groundwater Use

Aquaculture:	NR
Golf Course:	NR
Industrial:	NR
Irrigation:	NR
Mining:	NR
Water Supply:	53.88
Other:	NR
<b>Total:</b>	<b>53.88</b>

#### Surface Water Use

Aquaculture:	NR
Golf Course:	86.50
Hydroelectric:	12,700.00
Industrial:	583.03
Irrigation:	287.75
Mining:	NR
Nuclear Power:	2,814,848.00
Water Supply:	3,557.52
<b>Total:</b>	<b>2,832,062.80</b>

### Orangeburg County



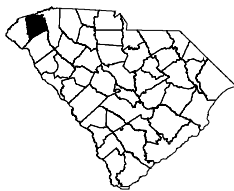
#### Groundwater Use

Aquaculture:	NR
Golf Course:	18.67
Industrial:	1,044.57
Irrigation:	2,664.31
Mining:	1,909.20
Thermal Power:	1,667.05
Water Supply:	625.79
Other:	NR
<b>Total:</b>	<b>7,929.59</b>

#### Surface Water Use

Aquaculture:	NR
Golf Course:	90.77
Hydroelectric:	12,700.00
Industrial:	171.42
Irrigation:	738.56
Mining:	NR
Thermal Power:	NR
Water Supply:	3,153.58
<b>Total:</b>	<b>4,154.34</b>

### Pickens County



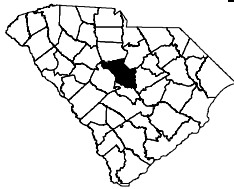
#### Groundwater Use

Aquaculture:	NR
Golf Course:	NR
Industrial:	NR
Irrigation:	NR
Mining:	NR
Water Supply:	NR
Other:	NR
<b>Total:</b>	<b>NR</b>

#### Surface Water Use

Aquaculture:	NR
Golf Course:	229.76
Hydroelectric:	2,769,742.00
Industrial:	3,279.95
Irrigation:	NR
Mining:	NR
Thermal Power:	NR
Water Supply:	3,454.32
<b>Total:</b>	<b>2,776,706.04</b>

### Richland County



#### Groundwater Use

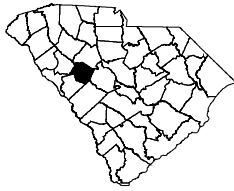
Aquaculture:	12.50
Golf Course:	24.53
Industrial:	660.46
Irrigation:	14.69
Mining:	312.85
Water Supply:	325.04
Other:	NR
<b>Total:</b>	<b>1,350.07</b>

#### Surface Water Use

Aquaculture:	27.30
Golf Course:	320.87
Hydroelectric:	469,660.89
Industrial:	10,260.40
Irrigation:	0.20
Mining:	NR
Thermal Power:	158,609.72
Water Supply:	22,683.18
<b>Total:</b>	<b>661,562.56</b>

NR = None Reported

### Saluda County



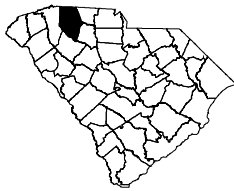
#### Groundwater Use

Aquaculture:	NR
Golf Course:	NR
Industrial:	NR
Irrigation:	NR
Mining:	NR
Water Supply:	79.02
Other:	NR
<b>Total:</b>	<b>79.02</b>

#### Surface Water Use

Aquaculture:	NR
Golf Course:	NR
Hydroelectric:	NR
Industrial:	NR
Irrigation:	367.52
Mining:	NR
Thermal Power:	NR
Water Supply:	NR
<b>Total:</b>	<b>367.52</b>

### Spartanburg County



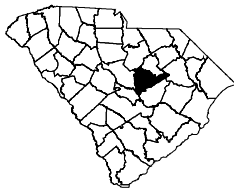
#### Groundwater Use

Aquaculture:	NR
Golf Course:	10.51
Industrial:	13.67
Irrigation:	NR
Mining:	NR
Water Supply:	24.85
Other:	NR
<b>Total:</b>	<b>49.03</b>

#### Surface Water Use

Aquaculture:	35.04
Golf Course:	1,009.375
Hydroelectric:	17,962.72
Industrial:	NR
Irrigation:	105.06
Mining:	NR
Thermal Power:	NR
Water Supply:	14,045.89
<b>Other:</b>	<b>33,158.09</b>

### Sumter County



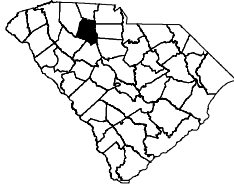
#### Groundwater Use

Aquaculture:	NR
Golf Course:	120.56
Industrial:	318.69
Irrigation:	1,117.81
Mining:	NR
Water Supply:	5,921.14
Other:	NR
<b>Total:</b>	<b>7,478.20</b>

#### Surface Water Use

Aquaculture:	NR
Golf Course:	175.31
Hydroelectric:	NR
Industrial:	NR
Irrigation:	504.40
Mining:	NR
Thermal Power:	NR
Water Supply:	NR
<b>Total:</b>	<b>679.71</b>

### Union County



#### Groundwater Use

Aquaculture:	NR
Golf Course:	NR
Industrial:	2.78
Irrigation:	NR
Mining:	NR
Water Supply:	NR
Other:	NR
<b>Total:</b>	<b>NR</b>

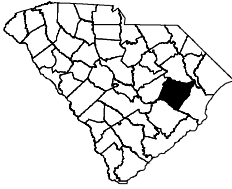
#### Surface Water Use

Aquaculture:	NR
Golf Course:	9.00
Hydroelectric:	186,662.01
Industrial:	571.5
Irrigation:	NR
Mining:	NR
Thermal Power:	NR
Water Supply:	1200.99
<b>Total:</b>	<b>188,443.50</b>

NR = None Reported



## Williamsburg County



### Groundwater Use

Aquaculture:	NR
Golf Course:	NR
Industrial:	902.65
Irrigation:	NR
Mining:	NR
Water Supply:	551.86
Other:	NR
<b>Total:</b>	<b>1,454.51</b>

### Surface Water Use

Aquaculture:	NR
Golf Course:	NR
Hydroelectric:	NR
Industrial:	NR
Irrigation:	2.15
Mining:	NR
Thermal Power:	NR
Water Supply:	NR
<b>Total:</b>	<b>2.15</b>

## York County



### Groundwater Use

Aquaculture:	NR
Golf Course:	47.06
Industrial:	5.54
Irrigation:	NR
Mining:	16.56
Water Supply:	29.63
Other:	NR
<b>Total:</b>	<b>98.78</b>

### Surface Water Use

Aquaculture:	NR
Golf Course:	153.41
Hydroelectric:	958,465.00
Industrial:	17,877.20
Irrigation:	2.55
Mining:	NR
Nuclear Power:	37,184.00
Water Supply:	5,780.89
<b>Total:</b>	<b>1,019,463.06</b>

NR = None Reported

## Appendix C: Population by County

### Population and Projections by County

County	2000	2005	2010	2015	2020	2025
Abbeville	26,167	26,740	27,610	28,480	29,350	30,210
Aiken	142,552	153,900	163,950	174,000	184,060	194,110
Allendale	11,211	11,820	11,960	12,110	12,260	12,400
Anderson	165,740	172,120	180,280	188,440	196,590	204,750
Bamberg	16,658	16,130	15,740	15,340	14,950	14,560
Barnwell	23,478	24,350	25,390	26,440	27,490	28,540
Beaufort	120,937	132,760	146,440	160,110	173,790	187,460
Berkeley	142,651	156,610	167,520	178,420	189,330	200,230
Calhoun	15,185	15,570	16,350	17,130	17,910	18,690
Charleston	309,969	320,080	328,570	337,070	345,560	354,060
Cherokee	52,537	54,770	57,860	60,960	64,050	67,140
Chester	34,068	34,630	35,500	36,370	37,240	38,110
Chesterfield	42,768	43,100	44,310	45,520	46,730	47,940
Clarendon	32,502	33,300	34,650	35,990	37,330	38,680
Colleton	38,264	39,910	41,590	43,260	44,940	46,610
Darlington	67,394	67,910	69,260	70,610	71,960	73,310
Dillon	30,722	30,220	30,280	30,340	30,400	30,460
Dorchester	96,413	106,590	115,430	124,280	133,130	141,980
Edgefield	24,595	25,490	27,400	29,320	31,230	33,150
Fairfield	23,454	24,260	25,010	25,770	26,520	27,280
Florence	125,761	130,140	134,510	138,870	143,230	147,590
Georgetown	55,797	58,300	61,770	65,240	68,710	72,190
Greenville	379,616	397,580	421,210	444,840	468,470	492,100
Greenwood	66,271	68,590	71,170	73,750	76,330	78,910
Hampton	21,386	21,810	22,690	23,570	24,450	25,330
Horry	196,629	215,850	239,020	262,190	285,360	308,530
Jasper	20,678	21,390	23,000	24,610	26,220	27,830
Kershaw	52,647	55,300	58,880	62,460	66,040	69,620
Lancaster	61,351	61,940	63,940	65,950	67,950	69,950
Laurens	69,567	72,800	77,190	81,580	85,960	90,350
Lee	20,119	20,540	21,010	21,480	21,960	22,430
Lexington	216,014	233,060	252,580	272,090	291,600	311,120
McCormick	9,958	10,670	11,290	11,910	12,530	13,150
Marion	35,466	35,930	36,390	36,840	37,300	37,760
Marlboro	28,818	28,100	27,460	26,820	26,170	25,530
Newberry	36,108	37,270	38,530	39,790	41,050	42,320
Oconee	66,215	70,910	75,470	80,040	84,600	89,160
Orangeburg	91,582	94,260	96,890	99,510	102,140	104,770
Pickens	110,757	119,040	127,110	135,190	143,260	151,330
Richland	320,677	331,810	345,660	359,520	373,370	387,220
Saluda	19,181	19,400	20,090	20,790	21,480	22,180
Spartanburg	253,791	267,390	280,590	293,790	306,990	320,190
Sumter	104,646	112,030	116,100	120,180	124,260	128,330
Union	29,881	29,720	29,480	29,240	29,010	28,770
Williamsburg	37,217	36,960	36,820	36,680	36,540	36,400
York	164,614	177,420	192,290	207,160	222,030	236,900
South Carolina:	4,012,012	4,218,460	4,446,240	4,674,050	4,901,810	5,129,630

## Appendix D: Glossary

**Aquifer** – A geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs. An alternate definition includes saturated material capable of providing economically viable amounts of water to wells or springs.

**Aquaculture water use (water use category)** – Water used for raising, farming and/or harvesting of organisms that live in water, such as fish, shrimp and other shellfish and vegetal matter (seaweed).

**Consumptive water use** – The amount of water withdrawn that is evaporated, transpired, incorporated into products or crops, consumed by humans or livestock, or otherwise removed from the immediate water environment.

**Effluent (wastewater)** – Water conveyed out of a wastewater treatment facility or other works used for the purpose of treating, stabilizing, or holding wastewater. Effluent is often highly treated and is an excellent option for reuse of wastewater for irrigation.

**Evapotranspiration** – Collective term, including water discharged to the atmosphere as a result of evaporation from the soil and surface-water bodies and plant transpiration.

**Fall Line** – The geologic and physiographic surface boundary separating the sedimentary deposits of the Coastal Plain from the metamorphic and igneous rocks of the Piedmont.

**Farm** – Any operation from which \$1000.00 or more of agricultural products were sold or normally would be sold during the year.

**Golf course irrigation (water use category)** – Water applied to maintain golf course turf, including tee boxes, fairways, putting greens, associated practice areas and periphery aesthetic landscaping.

**Groundwater** – Generally, all subsurface water as distinct from surface water; specifically, that part of the subsurface water in the saturated zone.

**Hydroelectric water use (water use category)** – Water used in generating electricity where turbine generators are driven by falling water.

**Industrial water use (water use category)** – Water used for commercial and industrial purposes, including fabrication, processing, washing, in-plant conveyance and cooling.

**Irrigated acreage** – Acreage capable of being irrigated, with regard to availability of water, suitable soils and topography of land.

**Irrigation water use (water use category)** – Water that is used for agricultural and landscaping purposes including turf farming and livestock management.

**Mining water use (water use category)** – Water that is used for in conjunction with surface or subsurface mining of minerals or natural materials

**Other use (water use category)** – Any use of surface water or groundwater not specifically identified in any of the other categories.

**Reclaimed water** – Wastewater treatment plant effluent that has been diverted, intercepted, or otherwise conveyed for use before it reaches a natural waterway or aquifer.

**Surface water** – Water flowing or stored on the earth's surface such as a stream, lake, or reservoir.

**Thermoelectric water use (water use category)** – Water used in generating electricity from fossil fuel (coal, oil, natural gas), geothermal, biomass, solid waste, or nuclear energy.

**Water supply (water use category)** – Water withdrawn by public and private water suppliers and conveyed to users or groups of users. Water suppliers provide water for a variety of uses including domestic, commercial, industrial and public water use.

**Water usage rates** – As utilized in this report, measurements to quantitatively represent volumetric withdrawals per unit of time; as in gallons per minute (gpm), gallons per day (gpd) and gallons per year (gpy). Unless otherwise stated, figures in this report are presented in millions of gallons per year.

**Water use** – Generally, water that is used for a specific purpose (i.e., domestic use, industrial, etc.). Broadly, human interaction with and influence on the hydrologic cycle, and includes water withdrawal, distribution, consumptive use, wastewater collection and return flow.

**Withdrawal** – The removal of surface water or groundwater from its current setting in the natural hydrologic system for use, including, but not limited to, water supply, industrial use, commercial use, domestic use, irrigation, livestock, power generation